DOCUMENT RESUME

ED 118 224 PS 0[illegible] 271

TITLE	Center for Early Development and Education Progress Report, 1971-72.
INSTITUTION	Center for Early Development and Education, Little Rock, Ark.
SPONS AGENCY	Office of Child Development (DHEW), Washington, D.C.
PUB DATE	15 Mar 72
NOTE	303p.; Reprints present in appendices of original document are copyrighted and therefore not available. They are not included in the pagination. Parts of some pages will reproduce poorly
EDRS PRICE	MF-$0.83 HC-$16.73 Plus Postage
DESCRIPTORS	*Day Care Services; *Early Childhood Education; *Elementary Education; *Experimental Programs; Home Programs; Inservice Education; *Intervention; Low Income Groups; Open Education; Parent Participation; Preservice Education; Program Descriptions; Research Projects
IDENTIFIERS	Arkansas (Little Rock); *Project Kramer

ABSTRACT

This report describes the evolving activities of an educational intervention program which is composed of (1) a comprehensive early childhood program for children from infancy through age 6; (2) a subsequent elementary program offering continuity of developmental support; (3) day care services, including after-school activities for school-age children; (4) a broad research program in child development and education; (5) a comprehensive array of supportive family services; and (6) preservice and inservice staff and student training programs. New developments and areas identified as needing change are discussed in relation to each aspect of the program. Discussion of the project's research activities includes an overall view of the research program and more detailed reports on Project AWARE (a human relations program for the primary grades) and Project LEAP (an experimental language training curriculum for 2- and 3-year-old day care children). The preservice and inservice training programs for staff and students are described. In addition, a consideration of future educational and research plans is included. Appendices, comprising two thirds of the report, include (1) essays describing the program and its underlying principles; (2) tables showing the program's testing schedule; (3) materials used for home intervention (approximately one-fourth of the study); and (4) papers concerning the powerful position of day care today, the effects of day care on children, and aspects of research programs involving the disadvantaged. (ED)

Documents acquired by ERIC include many informal unpublished materials not available from other sources. ERIC makes every effort to obtain the best copy available. Nevertheless, items of marginal reproducibility are often encountered and this affects the quality of the microfiche and hardcopy reproductions ERIC makes available via the ERIC Document Reproduction Service (EDRS). EDRS is not responsible for the quality of the original document. Reproductions supplied by EDRS are the best that can be made from the original.

✓

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED118224

CENTER FOR EARLY DEVELOPMENT AND EDUCATION

PROGRESS REPORT

1971-72

PS

SF-500

PS008271

Submitted to the Office of Child Development,
Department of Health, Education, and Welfare,
Washington, D. C., March 15, 1972.

CENTER FOR EARLY DEVELOPMENT AND EDUCATION

PERSONNEL

Barlow, Bill	Part-time Physical Education
Barton, Elaine	Principal
Black, Kathryn	Teacher, Elementary 6
Bomar, Faustenia	Vice Principal
Bynum, Wanda	Receptionist and Secretary
Caldwell, Bettye	Director and Professor of Education
Campbell, Ann	Research Assistant and LINDI Project Coordinator
Campbell, Janet	Research Secretary
Cooper, Mark	Kindergarten Co-teacher
Cromwell, Tricia	Computer Programmer and Research Assistant
Deadman, Pam	Teacher, Elementary 4
Donaldson, Thelma	Part-time Custodial Assistant
Elardo, Phyllis	Assistant Professor and Research Coordinator
Elardo, Richard	Assistant Professor and Research Associate
Fields, Jonathan	Teacher Aide and Video Tape Operator
Gillespie, Andrea	Research Assistant and Reading Lab Instructor, Intermediate Level
Hawk, Shelvie	Elementary Teacher and Speech Therapist
Henley, Edna	Teaching Assistant, Toddler Room
Herget, Carol	Special Education Teacher
Hill, John	Custodian
Honey, Julianne	Co-teacher, Toddler Room
Horn, Edith	Teaching Assistant, Three's
Huban, Barbara	Research Assistant and STIM Coordinator
Hutchinson, Beverly	Research Assistant and Remedial Reading Primary Instructor
Jackson, Evelyn	School Social Worker
Jefferson, Clemmie	Teaching Assistant, Baby House
Jeffries, Jimmie	Driver and Printer
Johnson, Marion	Teacher, Elementary 3
Jones, Bernice	Teaching Assistant, Toddler Room
Lang, Linda	Part-time Research Assistant
Latimer, Nina	Research Assistant and Baby Tester
Lehane, Steve	Research Associate
Mayer, Penny	School Psychologist
Melton, Phyllis	Part-time Research Assistant
Metz, Reba	Food Service and Cafeteria
Middleton, Mildred	Teaching Assistant, Kindergarten
Molden, Gladys	Teaching Assistant, Baby House
Mooney, Becky	Administrative Assistant
Moore, Ann	Lead Teacher, Kindergarten
Nowden, Lou Ethel	Elementary Teacher, Primary 1
Nutt, Margie	Lead Teacher, Four's
Perkins, Bernice	Teaching Assistant, Three's
Phifer, June	Lead Teacher - Babies
Plunkett, Diane	Research Assistant and Baby Tester

Porchia, Mary	Teacher, Elementary 5
Rhoads, Dorothy	Secretary to the Director
Rogers, Charlene	Teaching Assistant and CAP Student
Rorex, Joan	Lead Teacher, Three's
Runyan, Vivian	Part-time Teacher Assistant
Sapos, Barbara	School Secretary
Scifres, Claudia	Elementary Teacher, Primary 2
Shewmaker, Bobbie	Part-time Secretary
Starling, Velma	School Secretary
Starnes, Stephanie	Part-time Art Teacher
Stavros, Helen	School Social Worker
Stewart, Ray	Part-time Physical Education
Swift, Beverly	Teaching Assistant, Three's
Terry, Elizabeth	Lead Teacher, Toddlers
Trotter, Marnette	Co-teacher, Three's
Trotter, Pauline	Teaching Assistant, Four's
Walter, Pat	Part-time Research Assistant and Trainer for STIM
Wells, Sissy	Co-teacher, Four's

Table of Contents

I. Demonstration Activities

Population Demography 1
Preparatory Division 1
The Elementary Program 4
The Total Picture 7
Day Care 7
Supplementary Services 8

II. Research

Scope of Research Activities 11
Project AWARE 14
  Rationale for Project AWARE 23
  Description of Project AWARE 29
  Evaluation of Project AWARE 33
  Future Plans for Project AWARE 45
The Language Experiences and Activities Project (LEAP) 50
  Focus of the Present Study 55
  Method 56
  Future Plans 63

III. Training

Pre-Service Training 68
In-Service Training 68
Student Training 70
Student Teacher Training Program 70
Supervision and Evaluation 74

IV. Outreach Activities 76

V. Future Plans

Education Division Plans 78
Research Plans 80
Conservation and Reading Readiness 81
Summary 83

Appendices

A Kramer School -- Something for Everybody
B Guiding Principles
C SACUS Pamphlet
D Day Care - A Timid Giant Grows Bolder
E Day Care - From Pariah to Prodigy
F What Does Research Teach Us
G What Happens to Children in Day Care
H Testing Schedule
I Home Intervention Materials
J The Effects of a Supplementary Language Program on the Linguistic Performance of Preschool Disadvantaged Children
K Value Consonance Study

Preface

Early in February, 1972 the Advisory Council for this project held a two-day retreat called for the purpose of assaying our progress over the past two years, discussing our problems, and making plans for the future. Dr. Irvin L. Ramsey, Head of Elementary Education in the College of Education, began the first session with a brief review of the history of the project for the benefit of some of the relatively new members of the Council. He reminisced about a comment made by one of the original reviewers to the effect that the proposal reflected a great idea but an impossible one. Although the quote may not be exact, the sentiment was clearly: "It can't be done!"

Until Dr. Ramsey retold the anecdote, I had apparently kept the opinion successfully repressed. But, now that it has crossed the threshold of consciousness, I clearly recall smiling indulgently when I read it originally and thinking something to the effect: "I wonder what would make anyone think that. The idea is so logical, so timely, and so right that it ought to be easy."

The idea was logical, and timely, and right -- but making it all come to life has not been easy. Although, because of his anonymity, we can never directly confess that to our reviewer, we do it herewith indirectly. But note that the only part of the error we are confessing relates to the prediction that it would be easy; none of us engaged in the endeavor would agree that it cannot be done. The reason for that is simple: we are doing it. We still have a way to go, but in our first two-and-a-half years, we have come a long way. This report, plus the appended documents, will tell the story for us

Although it goes without saying that the success of this project depends on many people, many of whose names seldom appear on our papers, I always like to say it anyway. Accordingly, before anyone reads this report, he should read the staff roster which follows this preface and be reminded that the contributions of all of these people are woven into the narrative. In addition to their other contributions to the program, several persons contributed to the writing of this report. In every case their contributions are identified. Every part not otherwise identified was written by the project director.

In a way a progress report is a thank-you letter, if not a love letter, to our granting agency. We are extremely grateful for the opportunity to have participated in the task of designing a model facility for child development and education which links together early childhood and elementary education, day care and education, and a public school system and a university. We are convinced that this is the model which in the long run will best serve the children, their families, and the larger society. We hope you are pleased with what we have done and how we have done it; if you are not pleased, we hope that you will at least understand. For the privilege the staff thanks you, the children and their parents thank you, and I thank you.

Bettye Caldwell
Bettye M. Caldwell
Project Director

March 6, 1972

Chapter I DEMONSTRATION ACTIVITIES

The first component in the triad of activities to be contained in the projects designated as "special facilities" of the Division of Research of the Office of Child Development is a demonstration of the value of a pattern of service that would contribute to the welfare of young children and their families. Our demonstration was to consist of a program of early childhood education, beginning in infancy and involving both group and home-based intervention, that was an integral part of a public elementary school which would provide continuity of support for the participating children. A comprehensive array of family services was to be made available to the participating families, including day care for all the families who needed this service for their children. As a fairly lengthy description of all the demonstration aspects of the project has been written and enclosed as a separate paper (see Appendix A, "Kramer School--Something for Everybody"), in this part of the report we shall concentrate largely on (a) new developments and (b) areas in which we see a need for change.

Population Demography

Tables 1 and 2 present summaries of some of the major demographic characteristics of our sample.[1] From these tables one can infer that the families represent a fairly heterogeneous group with respect to occupation and education, with a slight skew in the direction of the low end of the scales. Although we had the impression that the racial composition of the neighborhood was changing, a comparison of the tables with those prepared for last year's report reveals that the proportions of whites and blacks is about the same as a year ago. We are in the process of preparing a brochure containing detailed demographic characteristics of our sample, a copy of which will be filed with the Office of Child Development.

Preparatory Division

It will be recalled that this is our idiosyncratic name for our "preschool" (a word we do not like to use) division. Things have gone so well in this division during the past year that, from the standpoint of the project director's time, the division has experienced a Moynihan-type "benign neglect." Every teacher we have is excellent, and our aides are now becoming competent and self-confident. While some might disagree with our general philosophy for organizing our educational program (see Appendix B, "Some Guiding Principles for Operating Day Care"), all would have to agree that our staff is doing an excellent job of doing that which we do.

---

[1] Preparation of these tables is largely the work of Miss Patricia Cromwell and Mr. Jonathan Fields.

TABLE 1 DEMOGRAPHIC CHARACTERISTICS OF CHILDREN ENROLLED IN KRAMER AND THEIR FAMILIES

Characteristic	Students (Total N-252)		Families (Total N=129*)	
	N	PERCENTAGE OF KRAMER POPULATION	N	PERCENTAGE OF KRAMER FAMILIES
Division in which Enrolled				
Preparatory	100	40%	46	36%
Preparatory & Elementary			25	19%
Elementary	152	60%	58	45%
Ethnic Origin				
White	96	38%	58	45%
Black	154	61%	69	53%
Other	2	1%	2*	2%
Sex				
Male	130	52%		
Female	122	48%		
Welfare Recipients				
On Welfare	24	10%	12	9%
On AFDC	52	21%	18	14%
Residence Patterns				
Living with both father & mother	148	59%	76	59%
Living with mother only	75	30%	39	30%
Living with father only	3	1%	3	2%
Living with adult relatives only	17	7%	9	7%
Living in Mitchell Home or Foster home.	6	2%	2	2%
Living with mother & adult relative	1	0%		
Living with father & adult relative	2	1%		

* Six Kramer children live in a residential treatment center operated by the Pulaski County Child Guidance Clinic.

Table 2: Employment Status of Parents of Children Enrolled in Kramer School
N = 127 Families, 203 Adults

Family Composition*	Unemployed	Unskilled	Semi-Skilled	Clerical	Skilled, Small Business	Professional, Technical	Unknown	Students	Total
Mother & Father in Home									
Father	6	12	26	4	17	5	5	1	78
Mother	27	6	27	4	4	2	5	1	76
Mother Only in Home	9	4	15	4	3	1	0	3	39
Father Only in Home	0	1	1	0	0	1	0	0	3
Adult Relative Only	5	0	2	0	1	1	0	0	9
Percentage of Mothers	31%	9%	37%	7%	6%	3%	4%	3%	
Percentage of Fathers	8%	16%	34%	5%	22%	8%	6%	1%	
Percentage of 203 "Employable" Adults	23%	11%	35%	6%	12%	5%	5%	3%	

*Elizabeth Mitchell Home excluded.

Baby House.[2] We made some important changes in Baby House this year which have definitely improved the program. The first of these was to give the role of principal caregiver to a registered nurse and to use as aides only those women who requested an assignment in Baby House. This change, and the program benefits associated with it, confirms the project director's convictions that it is easier to train a teacher in the type and amount of physical care that babies need. In addition to these important personnel changes we enlarged the separate sleeping area (which meant reducing the free play area -- but we hardly miss it) and forfeited an observation room in order to double the size of the bathroom. One research assistant and one family service worker regularly assist in Baby House at peak activity times, and three or four kindergarten children come in every day at snack time to help and to play with the babies. The atmosphere in Baby House in serene when it needs to be and gay and lively at other times.

Toddler Room.[3] Last year, partly because of our interest in trying multi-age grouping and partly because of our lack of space, we had our infants and toddlers in the same portable classroom (Baby House). This arrangement did not work well, primarily because of the differences in nap schedules chosen by the younger and older infants. Unless most of the babies were put to bed by 11:00 or 11:30, they would begin to fuss or appear tired and restless. As we try always to be sensitive to the physiological schedules of the children rather than to impose any schedule on them, they were put to bed at that time. Later, at 12:30 or 1:00 when the toddlers were ready to go down for their naps, the babies were ready to get up. As the one bedroom was just big enough to hold the cribs, the toddlers' cots had to be put down in the play area. That meant that, when the babies woke up, there was no place to rock them, feed them, or play and talk with them without disturbing the toddlers.

In view of this awkward situation, a room in the main school building was assigned to the toddlers in the fall of 1971. Borrowing some ideas from pictures we had seen of day care facilities abroad, we had a large "play pen" built into the room, giving the area added attractiveness with a play house balcony. The room is now one of the most colorful in the school, and the toddlers are favorites of the older children in the school. Two children from Special Ed come every day to help at snack time and to play with the babies. Half of the children in this group are participating in Project LEAP (Language Enrichment Activities Program), which will be described later in the Research chapter. The teachers in this group have been especially successful in involving parents in their program, and part of the room is furnished as a "parents' corner."

---

[2] Mrs. June Phifer, Principal Caregiver; Mrs. Clemmie Jefferson and Mrs. Gladys Molden, Assistants.

[3] Miss Elizabeth Terry, Lead Teacher; Mrs. Julianne Honey, Co-teacher; Mrs. Bernie Jones and Mrs. Edna Henley, Assistants.

Three's, Four's, and Five's.[4] Activities in these three groups proceed along a continuum ranging from relatively less to relatively more structured, although in all groups there are periods of planned activities and periods of child-initiated activities. Individual guidance of learning activities is provided by attention to our Developmental Objectives, which have now been used enough to be reorganized into more accurate sequences. We realize that we do not have enough objectives written for the oldest group and are working on new ones. In our five-year group, incidentally, there are at least two new items that should be given special mention. One is that we have a male teacher in this group (something that is always being asked about in early childhood programs), and the other is that for the first time we have an effective exchange occurring between the kindergarten and the first grade. We now have these two classrooms situated across the hall from each other, which makes for easy transition, but without the proper attitudes physical proximity means nothing. In the kindergarten group there were three little girls (all of whom were in the program last year) who showed unmistakable signs of being ready to read. Rather than develop an appropriate reading program for them in the kindergarten, we thought that in Kramer we should be able simply to have them work with the first graders during reading period. As it turned out, there were six children in the first grade who needed a great deal of readiness work. So every day these children change places during part of the morning. Teachers on both sides of the hall remain attuned to signs that the arrangement is meeting the needs of the children. Although it may seem like a small accomplishment, to us this exchange represented tangible evidence that the chasm between the preparatory and elementary divisions of the school is a little less deep and the bridge across it a little more substantial.

One final point should be mentioned about the utilization of the time of the teachers. There is a period ranging from one to two hours in length each day when the preparatory teachers are not really needed in the classroom. We feel that every teacher really needs to get away from her classroom during that time whenever possible and to engage in a different type of activity. Accordingly, each teacher has some kind of assignment from the Research Division during the daily nap period. Activities in which they participate during that time include the home intervention part of the LOIS (Longitudinal Observation and Intervention Study) project, coding research data, and running the control group for Project Aware. Each member of the research staff reciprocates by spending at least one hour a day engaged in activities that involve direct work with the children. We feel that this arrangement helps both categories of staff members to appreciate the contributions of the other and thus inevitably benefits the total project.

---

[4] Three's -- Mrs. Joan Rorex, Lead Teacher, Mrs. Marnette Trotter, Co-teacher; Mrs. Bernice Perkins and Mrs. Beverly Swift, Assistants. Four's -- Mrs. Margie Nutt, Lead Teacher; Mrs. Sissy Wells, Co-teacher; Mrs. Pauline Trotter and Mrs. Edith Horn, Assistants. Five's -- Miss Ann Moore, Lead Teacher; Mr. Mark Cooper, Co-teacher; Mrs. Mildred Middleton, Assistant. Mrs. Vivian Cossey, Substitute Assistant.

The Elementary Program [5]

In many ways, this has been the "elementary year" in the Kramer Project. As our principal, Mrs. Elaine Barton, expressed it at a recent faculty meeting, "The first year there was a preschool and an elementary school in this building; last year was a transition year; and this year it is all one project." In many ways this statement is accurate; yet in other ways we are still in transition between "two schools" and "one school."

One reason we are not yet one school is that our staff does not endorse one philosophy of education. We are not a group committed in advance to behavior modification, open education, Montessori, or any other clearly articulated educational philosophy (including the principal investigator's philosophy of the school as an ecosystem as in Appendix B). Undoubtedly the main reason that we are not all of one philosophy is that we did not select teachers on this basis the first year of program operation. Our project idea is so exciting and so compelling that it is easy for a teacher to react favorably to it initially. But, while there are many advantages offered the elementary teachers who are assigned to our project school, there are also some disadvantages. On the advantage side of the ledger can be cited extra money for equipment and supplies (although not much), a learning center (resource room) teacher, day care for their own children if needed (two teachers avail themselves of this opportunity), having more aides than is true in most other schools, participation in what is surely the equivalent of a university course in "current events in education," free time during physical education classes, availability of practice teachers, the opportunity to meet and talk with many visitors who have ideas to share, etc. But there are perhaps as many things on the negative side: the necessity for frequent changes as new ideas are tried, a possible stigma associated with "being supervised" even though they may have many years of experience; having to be "on stage" so often because of the many visitors and classroom observations, having to conform to a school policy about discipline rather than following their own individual preferences, occasionally having to bend their preferred schedules somewhat in order to accomodate the preparatory children, etc. Although we have requested permission to pay our teachers a little extra money, this has not been granted. Similarly, we have tried to get them graduate credit for their participation in our Faculty Forum, but to no avail. Thus it seems to some of us that our elementary teachers do not get enough value for themselves from the project.

At the time the project was launched, there was considerable discussion in the Advisory Council about whether a completely new set of teachers should be assigned to Kramer. Although some of us felt that this was desirable, we permitted ourselves to rationalize our acquiescence to the suggestion that we begin with the teachers already working in the school. In the first place, Little Rock had only shortly before that time reassigned teachers so that the proportion of white and black teachers in each school approximated that of the racial proportions in the total population of teachers (85 per cent white, 15 per cent black), and reassignment was a touchy subject. Also, it was suggested, the big test for the project was to see if one could take an existing school staff and train the personnel so as to accomplish the project objectives.

---

[5] Mrs. Elaine Barton, Principal; Mrs. Carol Herget, Special Education; Mrs. Lou Ethel Mowden, Primary 1; Mrs. Claudia Scifres, Primary 2; Mrs. Marian Johnson, Primary 3; Mrs. Pam Deadman, Intermediate 4; Mrs. Mary Porchia, Intermediate 5; Mrs. Kathryn Black Intermediate 6.

This rationalization was an easy one, as most of the teachers working in the school at the time the project began appeared to be excellent teachers. Several had many years of experience, and all had high ratings from supervisors and principals. All teachers who did not like the idea of the project were given the option to request a transfer, and one did this at the end of the first year. All other teachers who have left of their own volition have done so in order to return to school or because of retirement.

Master teachers or teaching interns. We have always conceptualized our project as being for education the equivalent of a teaching hospital for medicine (an idea suggested by Dr. Charles P. Gershenson). Accordingly we felt that all new teachers assigned to the school should be new and inexperienced and should have an opportunity to have much more supervision and training than is ordinarily possible for a new teacher. This plan has been followed with every replacement, and as of this writing we hope never to do it again. At the beginning of this school year, for example, we had three teachers who had never taught full-time before, and three inexperienced teachers out of seven comprise a critical mass that can throw the entire school out of balance. The new teacher hired this year was discharged by the Little Rock School District at the end of one month of teaching. A regular substitute filled the position until mid-year, at which time a fully certified teacher was hired to replace her. Thus the sixth grade of our model school can hardly be described as having had a "model" year.

We now realize that there is a basic incompatibility in being a "model demonstration" center and being a "training center" -- at least for teachers. Although our training program is quite outstanding this year, it does not compensate for lack of experience and skill as a teacher. Accordingly, in any future replacements, the main criteria for appointment will be (a) commitment to the philosophy and methods of the project, and (b) experience.

The problems of discipline and class assignments. Although in general we have had high morale throughout the school, we had one bad period this fall during the time the teacher who was discharged was still in the school. Unfortunately the principal became ill right after school opened and was not available for almost a month to provide any help to this inexperienced young woman. Most of her problems were due to the fact that she was unable to exercise even a modicum of control over the children in her class, and suddenly it seemed that disciplinary problems spread over the school like a prairie fire. Prior to the launching of the project, several of the teachers had used paddling as a method of control. Suddenly this control technique seemed to several of them to be called for again. Only a person who has not witnessed it or lived through it can appreciate the spectre of having a group of children fail to show respect for their teacher; we are all convinced that the most vocal educational critics who blame teacher ineptitude for all the ills of American education have never coped for a single, uninterrupted day with a class of obstreperous children. Although a few years ago the principal investigator might have been guilty of the same kind of carping, this is not any more!

It is the policy of the Little Rock Public Schools that physical punishment is not to be used on a child without (a) written permission from its parent and (b) having the parent present at the time of the act of punishment. Apparently this is a policy that is occasionally overlooked. (incidentally, we frequently have parents come to the school to insist that their children be whipped when they break the school rules.) The project supervisors tried in every way possible to strengthen this policy and to offer constructive help to the teachers in their efforts to help the children gain internalized controls of their own behavior. Essentially we have advocated what would be considered the behavior modification approach, without the use of consumable reinforcers but with reliance upon the earning of privileges. That is, we have urged: (a) reward desirable behavior; (b) ignore negative behavior if possible; (c) isolate the child from the rest of the group if (b) is not successful.

Our efforts in this struggle have both helped to attach the elementary teachers to the project and also to strain the relationship somewhat. For any attempt to encourage someone to consider alternatives is likely to be interpreted as implicit criticism of what was already being done. And so it has been in the instance of discipline. Yet at the same time we have helped to cement our relationship with the teachers by being sympathetic, by genuinely understanding their problem (often by virtue of long observations or actual supervision of offending children), and by helping to cope with the most disturbing children.

Here it is worth commenting that at this juncture all of us have open minds about the best way to handle disciplinary problems in the school. The principal investigator has long been, both in her personal and professional philosophy opposed to physical punishment. The same is true of two of our key research staff members, both of whom are recent graduates of a doctoral program which featured behavior modification principles. A third research staff member is almost a fanatic in his opposition to physical punishment. Yet we are all reviewing the evidence and trying to articulate a more consistent and comprehensive discipline policy for the school for next year. It may well be that, as Baer (1971) has suggested, punishment is occasionally necessary to get a response rate down to a level where behavior that is incompatible with the undesired behavior can be reinforced.

Such problems are not unique to Kramer; they appear to be virtually apidemic throughout the nation. Cohen (1972) suggests in a recent article that teachers with many years of experience are noticing in children af all social classes shorter attention spans, less sustained interest in materials, less ability to delay gratification, mose intense manifestations of frustration when things do not go exactly as was presumably desired. She attributes the change to our increased technology, to too many hours in front of the TV set, and to the ease of changing the channel instantly should things not be immediately appealing. Ours is becoming a culture of "get it now," or "do your own thing"; much of what we have written about the importance of developing internalized controls and cooperative rather than competitive motivational systems may become increasingly difficult to achieve. Whatever the explanation, we have seen a change at Kramer this year and intend to put more effort into understanding it during the next year than we have in the past.

The only other major dissatisfaction that we sense from teachers comes from our policy of assigning students on a true non-graded basis. This means that each teacher has a range of students that may cover three or more grade levels, possibly going up to five levels at the upper grades. Teachers in the past who have worked in schools where the dispersion of achievement is more narrow are very frustrated with this situation. However, there appears to be no way to avoid this in Kramer. The three upper elementary teachers are now, on their own initiative, entering into a team teaching arrangement and subject specialization (one teacher handles math with all students and one handles reading). This appears to be a useful way of coping with this extreme ability and achievement spread that characterizes our sample.

Changes in enrollment. Our biggest problem this year-- and in many ways the only one with which we are helpless to deal -- has been significantly greater mobility in our families. Our older children who have had any exposure to the preparatory program are now in second grade. Yet no more than half the children in that second grade attended kindergarten at Kramer, and half of those who did attend are in some other school. Furthermore, although this is difficult to document, it is our impression that many of the new families moving into the area are more deprived economically and educationally than has been the case in the past. We have had to concern ourselves with ways of coping with this increased mobility, and our major thrust in this direction will be the use of child advocates next year who will follow our children into whatever school they might enroll after a period of exposure to Kramer. Details of this plan will be described in Chapter V.

The Total Picture

Because of the complexity and scope of our program, it is easy to fractionate it even as we write and talk about it. However, it is a unified project, and when one looks at it in its totality, the pieces all fit together. In Figure 1 we offer a schematic drawing that describes the full range of activities in which we are engaged and which helps to visualize how each part is related to every other part.

Day Care

The day care component of our program has been one of the most gratifying parts of the project this year. Now fully understood and accepted by children, parents, and elementary staff, the service is utilized to full advantage. All last year we had to fight the attitude that the extended day care was only for the children under six; now, however, the age barrier has been completely broken. The after school activities which are most appealing to the older children are organized recreation and art. The physical education has similar appeal during the before school hours.

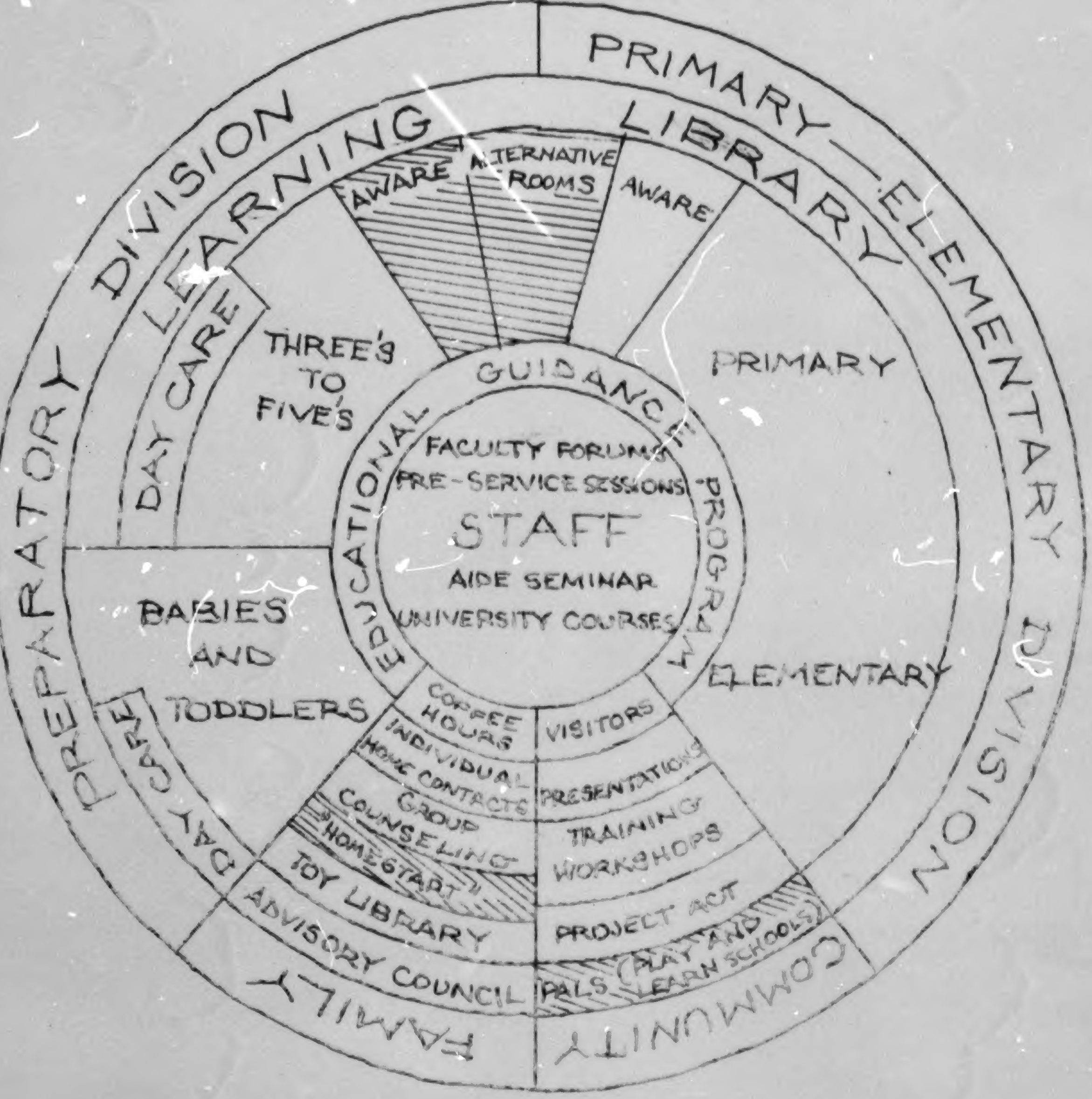
In terms of our outreach activities associated with day care, there have been two main activities this year:

(1) Workshop on Infant Day Care. During the winter of 1970-71, the project director was approached by Mrs. Margaret Cone, then president of SACUS (Southern Association on Children under Six), about offering a workshop on infant day care

Figure 1

CENTER FOR EARLY DEVELOPMENT AND EDUCATION
(Kramer School)

EDUCATIONAL SERVICES


PRIMARY—ELEMENTARY DIVISION
PREPARATORY DIVISION
LEARNING LIBRARY
DAY CARE
AWARE
ALTERNATIVE ROOMS
AWARE
THREE'S TO FIVE'S
PRIMARY
GUIDANCE
EDUCATIONAL
PROGRAM
FACULTY FORUMS
PRE-SERVICE SESSIONS
STAFF
AIDE SEMINAR
UNIVERSITY COURSES
BABIES AND TODDLERS
ELEMENTARY
COFFEE HOURS
VISITORS
INDIVIDUAL HOME CONTACTS
PRESENTATIONS
GROUP COUNSELING
TRAINING WORKSHOPS
"HOMESTART"
PROJECT ACT
TOY LIBRARY
DAY CARE
ADVISORY COUNCIL
PALS (PLAY AND LEARN SCHOOLS)
FAMILY
COMMUNITY

under SACUS auspices. We agreed, and the project director and Mrs. Betty Pagan, a local member of the SACUS Board, served as general chairmen of the event. Plans were worked out during the early spring of 1971, and possible workshop faculty contacted. Then an announcement was made about the workshop during the annual SACUS meeting in March. It was decided in advance to limit the size of the workshop to 200 participants, and that was roughly the number of persons who applied to attend.

The workshop was held in June at a hotel near Kramer. The faculty was exciting and well informed, and the participants were eager and enthusiastic. Most of us who had previously been engaged in similar workshops agreed that, because of the elan and commitment of the participants, this one was outstanding.

Proceedings of the Workshop were edited by Dr. Richard Elardo of the project staff and Mrs. Betty Pagan. At the time of this writing they have just come off the press, and a copy is enclosed as Appendix C. SACUS will have the pamphlets on sale at their 1972 meeting, which begins on March 23. We have been asked to consider repeating the workshop and may do so in the summer of 1973.

(2) Task Force on Child Care and the Family of the Governor's Commission on the Status of Women. The project director is Chairman (chairperson, one is forced to say) of this task force, originally called simply the Day Care Task Force. We changed the title of the group because of the concern of many knowledgeable persons that the label "day care" be broadened into the more accurately descriptive term "child care," we changed that part of the name of the task force. But, because of the project director's convictions that child care cannot be considered apart from the family, we further broadened our label into Child Care and the Family.

This task has turned out to be one with potential for influencing attitudes toward child care programs in this state. Membership on the task force comes from all over the state, with a concentration of representatives from right here in Little Rock. That concentration means that enough of us are here to interact more frequently than at our regular monthly meetings and to become fully conversant with day care needs and resources throughout the state.

Other Dissemination Activities. In addition to these two organized activities relating to child care, the project director has been involved in many speaking engagements in this field and has written rather extensively on the subject during the past year. The most widely disseminated of these papers was one that appeared in the *Saturday Review* in the spring of 1971. Copies of the following papers are appended to this report:

Appendix D -- Day Care -- the Timid Giant Grows
Appendix E -- Day Care -- from Pariah to Prodigy
Appendix F -- What Does Research Teach Us about
Day Care: For Children Under Three
Appendix G -- What Happens to Children in Day Care

Supplementary Services

The Supplementary Service Division has endeavored this year, and has made some arduous strides forward, to help fulfill one of the Project's major goals, that of "more intense involvement of families in their children's education," recognizing that "education which does not affect and strengthen the family can have only limited success." All parents have been personally contacted to obtain family data information and have been continually encouraged to interact in the numerous activities that have been planned for and with parents this year.

To begin with, a series of group activities were initiated with parents in September. We began by having "Kramer Koffee Klatches" to which all of the parents in the school were invited. Special activities were planned for these meetings, held every two weeks, such as showing a video tape of some of the classrooms, having Bingo games with toys as prizes, and making jewelry. However, the attendance and enthusiasm for these meetings declined steadily, after the 29 who came to the first meeting, so that there was only an attendance of six at an early November meeting.

The "Koffee Klatches" were thus discarded for a second form of parent involvement -- a parent discussion/education group. The core attenders of the Koffee group along with other available parents were invited to attend weekly one and a half hour meetings to discuss concerns in childrearing and family life. Four meetings were held before Christmas in which such topics as eating problems, sibling rivalry, disputes over chores, overprotecting children, granting increasing independence, were discussed. The eight meetings held after Christmas dealt more with concerns parents had about their children's progress in school and about their children's involvement in school problems, such as fighting on the playground.

Along with these parent group discussions, there has been a series of parent receptions every two weeks, sponsored by a different classroom each time. The last reception, held in the first grade, brought out ten parents and involved them in a discussion of first grade curriculum in addition to their classroom observations.

Several parents have recently expressed an interest in being more actively involved in the school, in doing more than just talking, so plans are underway for them to become volunteers in the school library and to staff a clothing booth.

Another "supplementary service" for families has been the Kramer Toy Box, a toy lending library from which Kramer neighborhood children are encouraged to check out toys. It began operating in the Kramer Service House on October 1, 1971. The library is open each Tuesday and Thursday and is run by the Supplementary Service staff. After a parent has registered his child, the child may select one toy to be returned the following week. An adult must accompany a child each time he borrows a toy. Parents are given a list of library rules and general play instructions which are discussed with them. They receive instructions on helping children play with the particular toys selected. After a child has borrowed and returned several toys in good condition, he is allowed to check out two toys.

Participation in the library has been enthusiastic and extremely regular by those who have joined, but it is hoped that even greater use can be made of this library in the near future. The parents that have used it have been very good about caring for the toys and returning them on time. However, the users often tend to be our families who already have toys in their homes and have few children. Other families, when approached by our staff, say they have too many children and that the toys will get broken or lost. Although they are assured that a loss or breakage is expected occasionally and that no reinbursement is necessary, they still hesitate to borrow. Perhaps another hindrance to participation has been the fact that the toy library has been situated in the Kramer Service House, entirely separate from

---

[6] Personnel in Supplementary Services are Mrs. Penny Mayer, Coordinator, Mrs. Evelyn Jackson, and Miss Helen Stavros. This part of the report was written by Penny Mayer.

from the school. Plans are being formulated to move it to the school so as to allow greater and easier access to more parents.

The Supplementary Service personnel also play a vital part in meeting the fundamental needs of the school, such as intake of Preparatory level children, helping with daily needs of children and parents, providing guidance and counseling service. Specifically, the Supplementary Service staff handle all information requests concerning admissions to the Preparatory level. If a child is felt to be an eligible candidate, several interviews are held with the parents and they are requested to visit the school. Thus at this initial orientation, parent involvement is stressed.

The Supplementary Division assists families by being responsible for any "contingencies" that arise in the school. A Supplementary Service member is contacted to check on absences, to transport children and/or their parents to clinics, etc., to help obtain needed clothing if it is not available in the school's closet, etc. The SS staff also assists with family problems and helps the family make application to appropriate community resources when deemed beneficial. A member of the SS staff usually attends school conferences with parents of children who are experiencing difficulty in school, either academically or socially, and gives further supportive service to the family if warranted.

The psychological examiner on the Supplementary Service staff completes guidance evaluations on children who have been referred by their teacher. The evaluations are followed up by a teacher conference and parent conference. If felt necessary, a social service work-up is also completed and a case conference held. Child counseling sessions have also been conducted by the Supplementary Service staff.

Thus the Supplementary Service Division has attempted to be all encompassing of family needs with the emphasis on helping parents to become more involved in the education process. We feel that gradually parent involvement is becoming more intense, particularly as more plans are made "with" parents, rather than "for" them, and we hope it will continue to grow.

Chapter II RESEARCH

This has been a year of unparalleled progress in our research services. Our staff is now better trained, and we added three new staff members capable of conducting independent research and of supervising the work of others. These three people--Dr. Phyllis T. Elardo, Dr. Richard Elardo, and Mr. Stephen Lehane--have immeasurably enriched the project. However, the bulk of the credit for our more efficient organization as a research operation goes to Dr. Phyllis T. Elardo who serves as our Research Coordinator. Also special kudos are merited by Miss Patricia Cromwell who is in charge of data coding and processing. For the first time we now have all our data in readiness for the asking of research questions and the obtaining of meaningful answers.

A Progress Report that must be written in March is awkward for us, as this is just prior to the time at which we begin to get our posttest data. Although some of our projects can operate independently of the school year, for most of our research activities we are tied into the school calendar. Accordingly we have requested permission to submit future progress reports in September or October, one of which is planned for 1972. In that report we will summarize all data obtained during this school year.

Scope of Research Activities

In this report we wish to introduce an overall view of our research program and then present a detailed report of two of our major research activities--Project AWARE (a human relations program for the primary grades) and Project LEAP (Language Experiences & Activity Program) for two- and three-year-olds.

Areas of Research Endeavor

Figure 2 contains a schematic drawing of our research commitment. Around the periphery are listed the areas in which we are engaged in research: program evaluation; direct service to teachers, students, and families; curriculum development; instrument development; and basic research that relates to children, families, and the broader social context. Each of these areas will be discussed briefly.

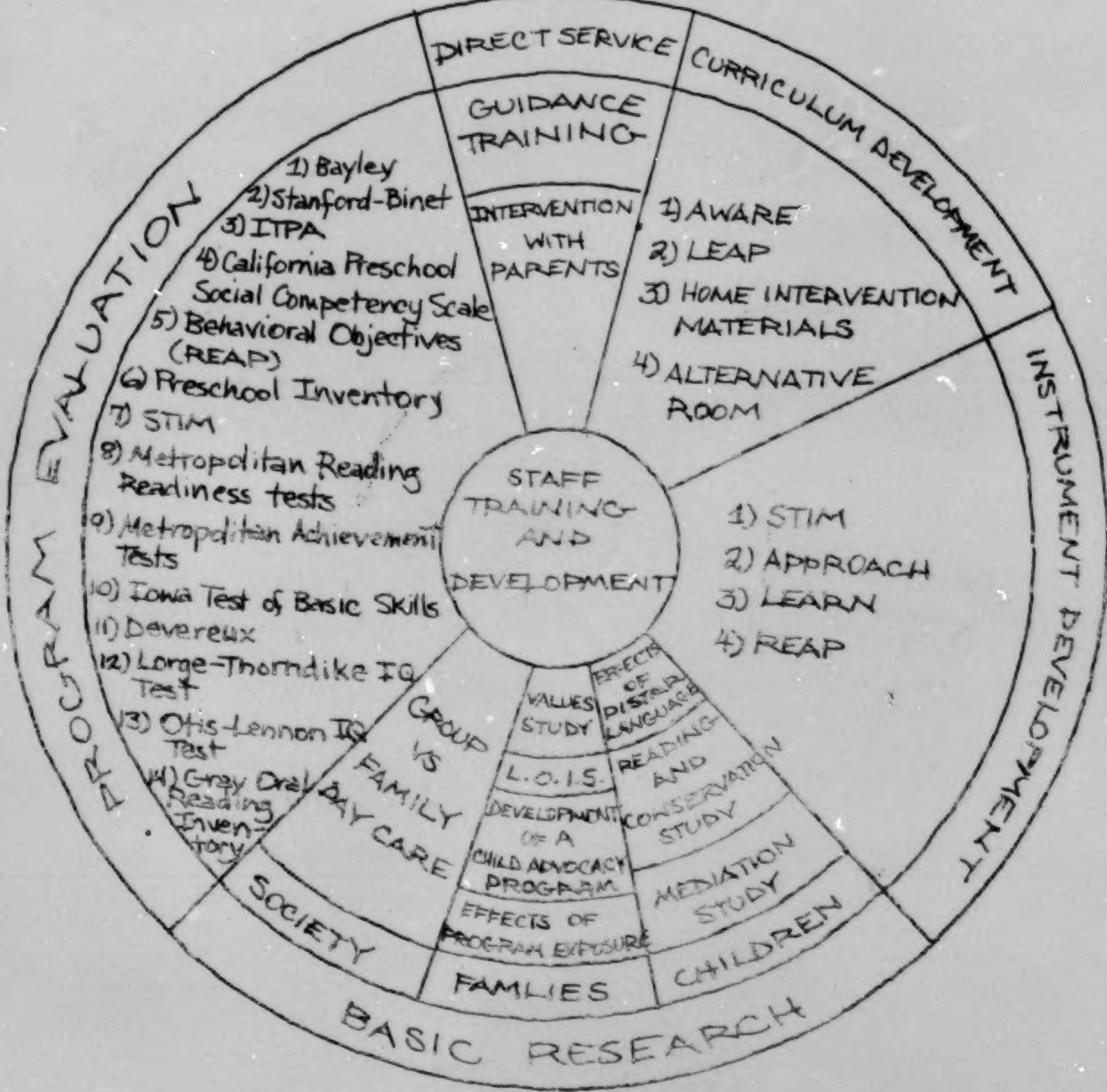
INSERT FIGURE 2 ABOUT HERE

Program evaluation. We have been simultaneously attempting both a formative and a summative evaluation of our program (Bloom, 1971), which has perhaps been a mistake. As this will be a major theme of our fall report, at which time we will have posttest data for this year, no further details will be given here. A detailed outline of the formal evaluation schedule is presented in Appendix H.

Figure 2

CENTER FOR EARLY DEVELOPMENT AND EDUCATION
(Kramer School)

RESEARCH SERVICES


DIRECT SERVICE
GUIDANCE TRAINING
INTERVENTION WITH PARENTS
CURRICULUM DEVELOPMENT
1) AWARE
2) LEAP
3) HOME INTERVENTION MATERIALS
4) ALTERNATIVE ROOM
INSTRUMENT DEVELOPMENT
1) STIM
2) APPROACH
3) LEARN
4) REAP
STAFF TRAINING AND DEVELOPMENT
PROGRAM EVALUATION
1) Bayley
2) Stanford-Binet
3) ITPA
4) California Preschool Social Competency Scale
5) Behavioral Objectives (REAP)
6) Preschool Inventory
7) STIM
8) Metropolitan Reading Readiness tests
9) Metropolitan Achievement Tests
10) Iowa Test of Basic Skills
11) Devereux
12) Lorge-Thorndike IQ Test
13) Otis-Lennon IQ Test
14) Gray Oral Reading Inventory
GROUP VS FAMILY DAY CARE
VALUES STUDY
L.O.I.S.
DEVELOPMENT OF A CHILD ADVOCACY PROGRAM
EFFECTS OF PROGRAM EXPOSURE
EFFECTS OF DISTAL LANGUAGE
READING AND CONSERVATION STUDY
MEDIATION STUDY
SOCIETY
FAMLIES
CHILDREN
BASIC RESEARCH

KEY:

AWARE -- Human Relations Program
LEAP -- Language Enrichment Activity Program
LOIS -- Longitudinal Observation and Intervention Study
REAP -- Regular Evaluation of Achievement and Progress
LEARN -- Children's Learning Styles
APPROACH -- A Procedure for Patterning Responses of Adults and Children
STIM -- Inventory of Home Stimulation

Direct service. Our research staff engages in a great deal of direct service to children, families, and teachers. For example, one of the research staff operates the school's resource room. All members of the research staff, it will be recalled, spend some time each day working directly with the children (usually as part of a research project, but not always). Evaluation data are regularly scanned to provide guidance for individual teachers that might be helpful in individualizing instruction. Also research staff members provide direct service to those families who are in the intervention subgroups of the LOIS project. We occasionally set up temporary "time out" rooms for disruptive children, and these must always be staffed by research personnel. Dr. Phyllis Elardo spends almost two hours per day working directly with the children in the first three primary grades; Dr. Richard Elardo spends one hour daily helping two's and three's acquire language. Repeatedly we have stressed the fact that there is no complete separation of the research activities from the educational activities in this project--a fact in which we take great pride.

Curriculum development. Any innovative educational program must be concerned in some degree with curriculum development. Although the project director likes to say that our task is to design an environment, not develop a curriculum, the task of environmental design cannot be accomplished without concern for the school curriculum. The curricula for AWARE and LEAP will be described in detail later in this chapter. Our LOIS project was described in some detail last year and will be referred to briefly in a subsequent section. Here, however, we should mention that the materials prepared for use with the parents involve curriculum materials. A copy of the booklet is included as Appendix I. Plans for the alternative room are described in Chapter 5.

Instrument development. Two of these (APPROACH, STIM) represent refinements of instruments that the principal investigator began developing in Syracuse. Despite its monumentally cumbersome nature, the APPROACH technique is now being discovered, and a number of investigators are using it in their own research. Recently we helped in the analysis of 40 parent-child dyads from the Hough Parent-Child Center in Cleveland using the APPROACH, and it demonstrated its versatility in being able to be coded from video tapes rather than live behavior. The Inventory of Home Stimulation (STIM) has been received eagerly by people all over the country who have been looking for some way to measure home environment objectively. During the past year we have collected and coded data on almost 200 families with an extension of the STIM that will be used with families of children in 3-6 age range. These data are now at the Computing Center being processed for a factor analysis. Within the next year we will begin working on a form useful with families of children of elementary school age.

During the past year we have become aware of our need to carry out more essentially diagnostic studies of learning patterns--not give more tests, but devise more procedures for observing learning in situ and deducing idiosyncratic learning styles which have clear implications for teaching procedures. To date we have done little on this but have chosen it as a major area for future development. In the diagram we have referred to it as LEARN.

The project director has long been committed to the strategy of formulating objectives for each segment of the learning ladder and having a procedure for informal monitoring of whether a child has achieved each objective. That is the way we plan our educational activities at the preparatory level. It would appear to be an equally efficient way of individualizing teaching at the elementary level, and we have begun the rather arduous task of formulating objectives for all the major subject areas of the elementary years--communication, math, social living, and personal development. These are identified in the diagram as REAP-Regular Evaluation of Achievement and Progress. It is our intention that these will be used both as guides for the teachers and also as progress books for the children. We have now prepared such objectives for a first run trial of their sequencing and their utility. During the summer of 1972 instructional activities will be catalogued according to these objectives and filed in an easily accessible location within the school library. Copies of the objectives as now formulated are available. We decided not to include them with the Progress Report for the simple reason that they are so bulky. Anyone interested in a copy may obtain it upon request.

Basic research. Here we have divided our activities into those that relate to children, to families, and to society. During the 1972-73 year we will have the benefit of a reading specialist from the University who will be half-time with us. Her work involves relating underlying cognitive structures as formulated by Piaget to the teaching of reading. More details of her project are contained in Chapter V. The mediation training study is still in progress and will be described in the fall. The DISTAR project is completed and is reported as a separate paper in Appendix J.

Our basic research relating to families is currently weak except in terms of the LOIS--our largest single substudy in the whole project. By summer almost 100 of the babies in that project will have reached 18 months of age, and we will do a midway evaluation at that time. The study on the consonance between parental values and values held by the project staff is now completed and is reported as Appendix K.

Finally we are planning to launch a major study using observational measures only comparing the environments of children in their own homes, in group day care (not at our Center), and in family day care. Arrangements to conduct this study have already been made with the Arkansas Department of Social Services.

Staff training and development. At the center of any research program there must be a continuing process of training. This indeed characterizes our research staff. Coordinated by Dr. Phyllis Elardo and contributed to by various staff members, research personnel are trained in a weekly seminar and in individual tutoring sessions. A number of our research staff have now enrolled in graduate degree programs. There is something very intellectually contagious about working in research in a project such as this.

The remainder of this chapter will be devoted to a detailed discussion of two of our major research endeavors--Project AWARE and Project LEAP.

PROJECT AWARE

A school program for interpersonal development

Phyllis T. Elardo

The recent report of the Joint Commission on Mental Health of Children (1970) is a response to mandate stated in the Social Security Amendments of 1965 and 1968. The Commission's purpose was to recommend to the Congress, the Secretary of Health, Education, and Welfare and the Governors of the States, action to improve the health and mental health needs of children. One of the Commission's conclusions was that schools have a tremendous potential for enhancing the mental health of all the children who attend them, for preventing the development of serious emotional disorders, and for improving the condition of those children who are already suffering from such difficulties. According to the Commission, the promotion of mental health through education should receive as much emphasis as does treatment of specific emotional and mental disorders.

Typically, children between the ages of 5 to 17 spend from 25% to 40% of their time in an educational environment. However, with the new national emphasis on early childhood education and day care (Caldwell, 1971) it is likely that children from infancy to 17 years will spend the majority of their time in an environment other than that of their family. Therefore, it appears that the nature of the child's educational experiences will play an even greater part in the development of children.

Societal Demands for Change in the Schools

While the educational system has always had great responsibility for inculcating "academic" knowledge as well as for "developing good citizens", many critics (Illich, 1971; Silberman, 1970; Holt, 1964) castigate the educational establishment for overemphasizing cognitive development while allowing what has been termed the "affective domain" to be slighted. The majority of people involved with education today see a great need to humanize education; as articulated by Silberman (1970)

> ". . . education should prepare people not just to earn a living but to live a life--a creative, humane, and sensitive life. This means that the schools must provide a liberal, humanizing education" (p. 114).

The problems in our society are obviously an indication that there needs to be a re-evaluation of what we are doing in our schools and other institutions to prepare individuals to live such a life.

The changes proposed by most educational reformers are to redesign the quality of life in the classroom. It is the author's view that the most important component of the quality of life in the classroom concerns how the school system and teachers relate to the pupils. However, the current emphasis in most classrooms between teacher and pupil has been on the best instructional method for the acquisition of the three R's. There is no widely accepted program in the interpersonal area even though all schools list social and emotional development as important goals; this lack of regularly programmed experiences in the affective area bears investigation. The majority of teachers perceive themselves as only minimally involved in the personal and interpersonal lives of their pupils although they spend six or more hours a day with them. Generally, teachers embrace the notion of teaching the "whole child," but actual practices in the classroom do not often support the idea. It has been documented (Flanders and Amidon 1967) that acceptance of feelings has accounted for only .005 per cent of the verbal interaction in many elementary classrooms.

It appears that we have formalized programs to teach children almost everything in school except to understand and accept themselves and others, and to function more effectively in interpersonal relationships. This lack of formalization of affective experiences has permitted the development of social behavior to be left to chance. The development of affective behavior in the classroom is not just another innovation, but one too long unrecognized as basic to the learning process in the daily classroom environment.

It is the school's place to deliberately attempt to foster, in addition to the 3 R's, such characteristics as the awareness of self and others and the ability to cope with interpersonal problems. The author believes that the role of the school as an agent of socialization should be carefully expanded into the affective domain as do others. The literature contains several attempts to provide training in interpersonal relations as part of the regular school day (Ojemann, 1957; Kellam and Schiff, 1968; Bessell and Palomares, 1969; Glasser, 1969; Borton and Freeburg, 1970; Dinkmeyer, 1971; Long, 1971).

The present endeavor, called project AWARE, represents an attempt to create an environment within the school in which the affective development of all children is facilitated.

Some Current Programs Designed to Humanize Education

At the present time there are several programs available to educators which share the common goal of enhancing interpersonal development among school children.

A "Causal" Approach to Human Behavior

One of the first attempts to humanize education was Ralph Ojemann's program originally begun at the State University of Iowa and now continued in Cleveland, Ohio. After many observations of teachers and parents and their dealings with child behavior, Ojemann (1958) concluded that a surface approach was being used. For example, if a child pushed in line, a teacher approaching the behavior would treat the behavior as a surface phenomenon and would try to stop it by dealing with the hitting and not looking at the causes for the behavior. Similar examples were found in parental responses to behavior problems. Ojemann also examined curriculum materials and found that a similar "surface" approach was being presented in many textbooks.

Consequently, Ojemann began to search for ways to change the curriculum to make it more dynamic and responsive. The assumption underlying a dynamic approach is that there are causes for behavior and if one takes these into account when dealing with children the chances for cooperative and mutually satisfying interaction will be increased. Ojemann suggested that the whole curriculum be based on a dynamic approach and has worked on ways of teaching reading, arithmetic, and social studies from this viewpoint. He has held numerous workshops and in-service training sessions with teachers to encourage the use of the dynamic approach in their relations with children.

Over the years materials have been prepared by Ojemann for children from kindergarten to secondary school to help them grasp an understanding of human behavior. Currently Ojemann is director of the Educational Research Council's Department of Psychology and Preventive Psychiatry(Griggs, 1970). Ojemann and his associates have also set up Project G.O.O.D. (Guiding One's Own Development) for children in the fourth through sixth grades. Project G.O.O.D. provides opportunities for the child to begin taking responsibility for his present development and allows him to make decisions about his learning in the classroom. The purpose of project G.O.O.D. is to prepare the child for guiding his development outside the school setting.

Research evidence indicates that when teachers use the "causal" approach there are changes in understanding and acceptance of others, self concept, anxiety level, and responsibility in the classroom. (Stiles, 1950; Levitt, 1955; Ojemann, 1956; Bruce, 1957; Muuss, 1960; Griggs, 1970b).

Ojemann's efforts, which began in the 1940's, indicate that the need to humanize education has long been recognized. His careful preparation of materials and his attention to research should serve as an example to those engaged in new programs.

The Woodlawn (Chicago) School Mental Health Intervention and Training Program.

The Woodlawn Mental Health Center is a facility of the Chicago Board of Health and is supported by the State Department of Mental Health (Kellam & Schiff). It is affiliated with the University of Chicago Department of Psychiatry. Since April of 1964, at the request of the Woodlawn Organization Advisory Board, the Center has developed collaboratively with the nine public and three parochial schools in Woodlawn a program of prevention and early treatment for the 2,000 first graders who enter the schools each year. Sheldon Schiff and Sheppard Kellam have served as project directors of this program.

The goal of the program is to help each first grader have the greatest possibility for success in his first year of formal schooling. Of the twelve schools in the Woodlawn area, six were designated as treatment schools and six as control schools. The treatment consisted of weekly meetings held in the classrooms for approximately 30 minutes a week. At first parents were not included in the meetings, but as the program evolved parents were encouraged to attend. The topics of the meetings concerned how the children, parents, or teachers felt about how the class was doing with regard to helping each child become a better student.

Weekly staff meetings were also held between the principal, administrative staff of the school, first grade teachers, school community mental health workers and the mental health professional. These meetings generally dealt with problems between principal and teachers and problems of the school in relation to the families.

In 1968-1970 parents and educators from the six intervention schools received further training in intervention and then began expanding the program by working with the six control groups.

The ideas behind the Woodlawn Project have been quite sound; however, the research generated from the project has not been impressive. Possibly with so large a sample it was impossible to do more than use rating scales and head counts. The effectiveness of the program was based on the teachers' ratings of children's behavior, amount of parent participation, and reading achievement gains. In terms of teacher ratings, the percentage of children improving in adaptation on the global scale increased by 4 to 8½ per cent. There was a two month gain in reading achievement in the treatment schools as compared to the control schools. The principal independent variable of the entire project was difficult to define other than to say that classroom meetings were held and parents were sent invitations to attend. The reports of parent attendance at the classroom meetings is the most encouraging and most unique contribution of the whole project. The ability to involve parents in the schools is a very complex and extremely difficult task. The Woodlawn Project's success is suggestive of the elements necessary for parental involvement.

Future plans of one member of the original team include expanding the program to the preschool level (Schiff, 1971).

In future work it seems that it would be important for the investigators to isolate several variables for in-depth study-such as parental attitudes toward school.

The Philadelphia Affective Development Program

This affective program is a part of the Philadephia School System and is directed by Norman Newberg and Terry Borton. It is an attempt to change the school to meet the needs of the students. So far the work has been concentrated in the high schools. The program differs from others because it involves the students and teachers in a changing curriculum which is primarily directed to the student's interests (See Borton and Newberg, 1970).

The directors indicate that they had tried the "quick cures" for the problems in the schools: mental health school committees, crisis meetings, sensitivity training, retreats, and counseling groups. Their reaction was that there was a high level of verbiage from committees and meetings with no change in the learning environment. Thus the directors decided to work with the system as a system and change it.

Each new teacher in one area of Philadelphia attends a thirty hour training program for new teachers which is followed by weekly school meetings. These meetings are concerned with further training about practical problems; every month an outside expert comes in for these meetings. Frequently there are weekend retreats devoted to working on the teachers' own personal concerns. Throughout this training the teacher is given a feeling of support for change. Thus the program has been directed at the teachers and their changing of the system (Newberg, 1969).

The personnel of the Affective Development Program serve in a advisory capacity only. The teachers are responsible to the department heads and principals.

So far there is no empirical research to indicate that this change in system has been effective in meeting the needs of the students. The directors have indicated that their concern lies in changing the schools and that "hard data" will come later (Newberg, 1969).

The Human Development Program (San Diego)

Harold Bessell and Uvaldo Palomares (Bessell, 1970) have taken the position that remedial techniques are not the best means to deal with adolescent and adult emotional problems; the emphasis of their program with children is on prevention. The two have collaborated and developed a preventive program for young children (5-8 years of age) which stresses awareness, social interaction, and mastery. Awareness is defined as the ability to have insight into and acceptance of one's own feelings. Social interaction skills are those which help in the understanding and acceptance of others. Mastery concerns the achievement of responsible competence at a task.

Daily program guides (Bessell and Palomares 1969) have been developed. A special time of day designated as the "magic circle" time is suggested for using the programs. At the magic circle time children sit in a circular arrangement around the teacher. The developers suggest 8 to 12 children at first, with the rest of the children taking a position outside the inner circle of children. The inner circle members are in the "magic circle." Members of the outer circle observe the members of the magic circle participate in the program with the teacher. The membership in the "magic circle" varies from day to day so that all children have an opportunity to participate. The teacher presents a topic for discussion and the children are expected to discuss the topic for approximately 20 minutes. Each one of the major themes-awareness, social interaction, and mastery-are of central focus for six weeks. The teacher's role in the discussion is to listen carefully to each child's verbalizations but to be non-judgmental and non-directive. The program materials consist of the daily lesson plans for each of three age levels (kindergarten, first, and second grade), and the theory manual. The program is to be expanded into the upper grades; grade three materials are to be available in the spring of 1972.

The program developed by Bessell and Palomares is very innovative. With all the emphasis on mental health in children, it represents a refreshing approach in that it tells the educator what might be tried. The theory manual is clearly written, and the lesson guide is easily understood. It is obvious that the authors have spent a great deal of time preparing their materials.

There were several weaknesses in the program that should be mentioned. First of all, the authors should emphasize more strongly that the program is based on theory and not fact. Many of the statements in the theory manual are presented in a dogmatic manner, and readers should be aware that the authors are drawing heavily from neo-analytic and self-actualization personality theories of Adler, Horney, and Rogers. Secondly, there are many statements made in the manual which are not supported by data. For example, at one point the author states that when people sit in a circle, they "feel close and less unconnected to each other . . . feel less inferior or superior to each other," etc. These statements are hypotheses and beliefs, and perhaps they should be stated as such until there is evidence to support the claim. Thirdly, even though the daily lesson guides are clearly explicated, there should be more program development in supplementary activities. Many young children do not have an adequate vocabulary with which to discuss their feelings. Especially with disadvantaged groups, there is a need for concrete enrichment experiences to promote conceptual development. In the author's own work with Project AWARE she has found that young disadvantaged children often tire of discussion groups unless the leader provides many enrichment activities and stimuli for learning (stories, plays, songs, etc.).

The William Glasser Approach

Classroom meetings have been advocated strongly by William Glasser (1969) as a means to help children acquire the idea that they have some control over their environment. Glasser suggests three types of classroom meetings that might be incorporated into the curriculum. The three are:

(1) social problem solving meetings-pupils discuss social behavior in school and develop social codes.

(2) open-ended meetings-pupils discuss academic subjects.

(3) educational diagnostic meetings -pupils discuss the concepts of the curriculum and are allowed to question 'why' a particular topic is relevant.

Glasser's approach is very similar to the Schiff and Kellam program mentioned above, in that both programs are providing a forum for children to discuss their problems and concerns. It should be emphasized that both view the teacher's role as one of facilitator and guide during the class meetings.

Glasser (1969) emphasizes that if children have a feeling of involvement in what the schools are doing, an increase in achievement level should result. He bases this assumption on the Coleman Report (1966) which indicated that the pupil characteristic which appeared to have the strongest relationship to achievement was the extent to which a pupil feels he has control over his own destiny. By discussing their concerns and being able to solve their problems through the discussion group, it is hoped by Glasser and others that children may acquire this sense of potency.

As of this writing, research evidence documenting the effectiveness of this program is not available.

The Behavioral Science Program (St. Louis)

In 1969 Barbara Ellis Long (1971) began with sixth graders a behavioral science program to enhance coping skills and prevent disturbances in the classroom. The behavioral science curriculum is based on a group of experiments, primarily borrowed from experimental psychology. The focus of the programs is "Why do people act as they do?" The program has been set up so that there are programs for only part of the year and the classroom teacher and students are responsible for creating other programs. Therefore, the teacher and students are responsible for "lessons" according to their own interests. The general plan of this curriculum is to allow children to be actively engaged in human behavior experiments; the children are involved directly since they are participants in the experiment. The second step is a general discussion of the experience. The teacher serves as a facilitator and guide for the children's ideas; the teacher rarely answers a question. The format then is from specific data to general principle and then to application. The children are said to be deeply involved in the whole process and answers are arrived at through group discussions.

Research data on the success of this program will be presented at the American Orthopsychiatric Meeting in the spring of 1972.

The "Developing Understanding of Self and Others" Program (DUSO)

Don Dinkmeyer (1971) noted in a recent article that there is a lack of required, sequentially developed programs in self-understanding and human behavior. Citing this lack of a developed curriculum in the affective area, Dinkmeyer has developed an elaborate series of programs for developing understanding of self and others. The program is entitled Developing Understanding of Self and Others (DUSO) and is intended for use in kindergarten and the primary grades.

The focus of the program is on eight developmental tasks that are relevant to young children. The eight tasks are:

1. Developing an adequate self-identity, self-acceptance.
2. Learning a giving-receiving pattern of affection.
3. Learning to develop mutuality, moving from being self-centered to effective in peer relations.
4. Learning to become reasonably independent and to develop self-control.
5. Learning to become purposeful and to seek the resources and responsibilities of the world, to become involved, and to respond to challenge with resourcefulness.
6. Learning to be competent, to achieve, to think of self as capable of mastery.
7. Learning to be emotionally flexible and resourceful.
8. Learning to make value judgments and choices, and to accept the consequences of one's choices.

The program includes recorded stories, songs, open-ended stories, discussion starters, puppetry, role-playing activities, art, and other experimential activities. The goal of the program is to develop individuals with self understanding, a positive self-concept, to learn that behavior is caused and purposive, and that there are reasons why human beings act as they do. The DUSO kit contains materials which have been elaborately designed. Formal evaluation of the program will be reported at the American Educational Research Association meeting in the spring of 1972. At this meeting Dinkmeyer is presenting an experimental study and there is a paper on an affectivity measure developed to measure the effectiveness of DUSO.

Summary

It should be pointed out that anyone using any of the affective programs must be a very sensitive, accepting, and empathetic person. The success of an affective program rests not only on the materials and lesson guides but on the quality of the interaction between teacher and pupils. Of course, this is true in every area, but it is especially critical with an affective program. If and when teachers implement affective programs such as those described, their didactic role must change. The role of the teacher must become one of facilitator and guide. If the teacher uses discussion groups as a means of giving children knowledge and conveying judgments, the whole purpose of any program is defeated. Children should be allowed to interact and reach their own decisions. Additionally, the individual who chooses to use these programs should be aware of his limitations; he should not assume that he has the training and expertise to set up psychotherapy or group encounter activities for children. From discussions with people using one of the affective programs, several have commented that they are calling themselves and the teachers "therapists." It is felt that this is a unfortunate choice of titles as "therapists" are usually highly trained professionals who do in-depth analyses of patient's behavior. The indiscriminate use of such titles may create misunderstandings between parents and the schools.

All of the programs described in this paper can be characterized as changing the curriculum. Ojemann (1958) and Borton and Freeburg (1970) are attempting to have an impact on the entire curriculum. Others Kellam and Schiff, 1968; Bessell and Palomares, 1969; Glasser, 1969; Dinkmeyer, 1971; Long, 1971) have set up an expansion of the curriculum to include affective development. The present project, Project AWARE, is an attempt to expand the curriculum in the affective area.

Rationale for Project AWARE

The goals of all the programs described are basically the same--to develop children who have meaningful and successful interpersonal relationships. Of course, there may be many means by which this goal might be achieved. At the present time it is an empirical question which techniques and materials are most appropriate to achieve these objectives.

It is the belief of the present author that any program for children should have a strong developmental rationale. There is wide acceptance of Piaget's developmental theory which indicates that children's thinking is qualitatively different from adolescents and adults. For any program to achieve success in the cognitive domain, attention needs to be given to Piaget's theory. The social-cognitive area is no exception; careful attention should be given to how children think in designing an affective program.

The development of social-cognitive behavior: taking the role of the other.

There has been a concentrated effort on the part of psychologists to describe children's knowledge of the physical world, i.e., reasoning and problem solving in the non-social environment. Thousands of studies deal with how children learn. There are hundreds of achievement tests set up to measure how well a child reads, adds, and subtracts, and reasons with respect to the physical world. However, there is a paucity of empirical data and tests available to measure the ontogeny of social-cognitive behavior (Wallach, 1963). Social-cognitive behavior can be broadly defined as the understanding of interpersonal relationships.

Piaget and his followers have offered the most comprehensive theoretical and empirical contributions in the various facets of cognitive development. Additionally, Piaget has added valuable concepts to aid in our understanding of children. One such concept has been the notion of egocentricity. Egocentricity is said to occur when a child is not capable of viewing situations from the standpoint of other persons and is not able to communicate effectively with others (Piaget, 1969). From his many observations of children Piaget states that children before the age of 7 or 8:

> ....do not understand each other any better than they understand us. The same phenomenon occurs between them as between them and us; the words spoken are not thought of from the point of view of the person spoken to, and the latter, instead of taking them at their face value, selects them according to his own interest, and distorts them in favor of previously formed conceptions (Piaget, 1969, p. 113).

Piaget states that children at the six to seven-year level think largely in perceptual rather than conceptual terms while later at eleven to twelve years of age the child engages in abstract reasoning. Piaget (1969) claims that egocentrism enters into all areas of the young child's life:

> How then are we to characterize the stage of understanding between children before the age of 7 or 8? It is no paradox to say that at this level, understanding between children occurs only in so far as there is contact between two identical mental schemas already existing in each child. In other words, when the explainer and his listener have had at the time of experiment common preoccupations and ideas, then each word of the explainer is understood, because it fits into a schema already existing and well defined within the listener's mind. In all other cases the explainer talks to the empty air. He has not, like the adult, the art of grasping what is standing between him and the explainer, and adapting his own previously formed ideas to the ideas which are being presented to him (p. 133).

Since egocentrism pervades all areas of the child's life, it certainly plays a role in the child's social relationships. One way this has been measured is byinvestigating the child's ability to "take the role of the other." Piaget and Inhelder (1956) have studied this particular aspect of egocentrism: role taking. In one study aimed at perceptual role taking they set up a situation in which children from 4 to 11 years of age were shown a model of three mountains and were asked to select from a series of pictures how the mountains look to a doll sitting on the opposite side of the mountain from the child. The younger children were only able to choose pictures which represented their own perspective. By the middle age range children were able to represent another person's perspective, as measured by their choices of pictures of the mountains. An earlier study by Piaget (1969) indicated that young children used speech egocentrically in their communications with others. Piaget's procedure was to tell children from 6 to 8 years of age a story; they then told the story to another child who in turn told it to another child. Piaget's observation was that the children spoke as if they were talking to themselves leaving out information needed for their listeners to understand the story. By 7 or 8 years of age there was evidence for socially communicative speech.

Piaget's investigations provided the theoretical basis for Flavell's work in 1968. The publication by Flavell (Flavell, 1968) is a summary of research studies on role taking and communication. Flavell and his associates constructed a crude working model of the nature and integration of the two abilities--role taking and communication--and then used the model as a heuristic device for identifying more specific abilities, and finally developed a number of tasks which seemed to be tapping these particular abilities. Working from this model Flavell and his associates argue that the speaker must analyze the listener role characteristics (role taking) before the speaker can send an effective communication; otherwise the message becomes egocentric and difficult for the listener to interpret.

The purpose of developmental--descriptive work in the areas of role taking and communication by Flavell and his associates (Flavell, 1968) was to provide a first approximation of what develops and when in the domain of role taking and communication behavior. The ontogenetic development of these two forms of social-cognitive behavior were defined as:

(1) the general ability and disposition to "take the role" of another person in the cognitive sense, that is, to assess his response capacities and tendencies in a given situation; and
(2) the more specific ability to use this understanding of the other person's role as a tool in communicating effectively with him (Flavell, 1968, p. 1).

The data collected by Flavell suggests that older children are able to take the role of the other and communicate more effectively with their audience. It was found taht children between the ages of 8 and 10 seem to be progressing toward a less egocentric view and were able to use role-taking skills in solving interactional problems. Even though there was a developmental change over the ages studied by Flavell he notes in his discussion that there was wide variability even at some of the older ages.

Thus from the work of Piaget and Flavell it appears that there is a developmental change from the ages of 7 to 9 in the "ability" to take the role of the other.

Flapan (1968) has also studied the ability to take the role of the other; her specific question was to investigate children's ability to describe and make inferences about feelings, thought, and intentions that occur in interpersonal relationships and children's ability to account for the sequences of behavior that occur. Flapan used sound filsm potraying episodes of social interaction and presented these to children at various age levels and noted the children's own accounts of what had happened and their responses to a specific series of questions. There were 20 children at each of the following age levels: six, nine, and twelve. All subjects were girls.

The film that was used was Our Vines Have Tender Grapes; several excerpts were given to the subjects and they were asked questions about each episode. Each excerpt portrayed a variety of feelings, motivations, family relationships and social situations.

Children were asked to describe each episode in their own words. Their responses were analyzed into three categories. The three categories were (1) reporting-describing, (2) explaining, and (3) inferring interpreting. The observed developmental trends can be summarized as follows: with increasing age children were more able to give causal explanations and to make interpretations of feelings or to infer thoughts of the characters which were not overtly expressed in the movies. The children were also asked to respond to interview questions about the movie. Again there was a developmental trend with younger children answering more literally and referring to the actual situation while the older children were less literal in their interpretations and we were able to explain, interpret, and to infer feelings, thoughts, and intentions.

Generally younger children gave responses that fit into Piaget's perceptual mode. There were relatively few interpretations of the feelings or thoughts of the characters in the film at the six-year level. The nine and twelve year olds referred to the feelings and thoughts of the characters in the film more often than the six-year olds. This study is supportive of the idea that older children are more capable of viewing situations from the standpoint of the other person.

One of the most interesting findings was that wherever there were statistically significant differences between the six-year-olds and twelve-year-olds, there were also statistically significant differences between the six-year-olds and the nine-year-olds. The suggestion from these data is that there is a period of change between the ages of six and nine years of age.

This study investigated an area of cognition that is relatively unexplored: the child's ability to perceive or to make inferences about feelings, thoughts, and intentions, and his ability to interpret or explain sequences of behavior that occur in interpersonal relationships.

Bloom (1964) has suggested that the greatest impact on a characteristic can be made during its most rapid period of growth. From the theoretical standpoint of Piaget, and research studies by Flavell (1968) and Flapan (1968), there appears to be such a rapid period of growth between the ages of 6 and 9 in children's ability to "take the role of the other." Flavell (1968) noted that the experiences necessary for the acquisition of this ability have been relatively unexplored, and suggested that role taking might be facilitated by social interaction:

> .....social interaction is the principal liberating factor, particularly social interaction with peers. In the course of his contacts (and especially, his conflicts and arguments) with other children, the child increasingly finds himself forced to reexamine his own percepts and concepts in the light of those of others, and by so doing, gradually rids himself of cognitive egocentrism (Flavell, 1963, p. 279).

Thus the introduction of interpersonal proglem solving experiences for children between the ages of 6 and 9 seems a logical beginning point for facilitating the acquisition of role taking. The group discussions of Project AWARE were designed to provide the social interaction necessary to facilitate role taking.

It should be added that role taking not only appears necessary for effective communication and interpretation of others' behavior, but role taking ability may also be necessary for higher levels of moral development. Selman

(1971) investigated the relationship between two age related social cognitive processes--the ability of the child to take the role of the other and the ability of the child to take the role of the other and the ability to make qualitatively higher-level moral judgments. The purpose of the study was to determine whether in middle-childhood the ability to take the role of the other is a necessary condition for the development of higher levels of moral judgment. The subjects were middle-class children between the ages of 8 and 10. Children were given two of Flavell's role taking tasks (Flavell, 1968) and Kohlberg's Moral Judgment Scale (Kohlberg, 1963). The general findings were that the greater ability to take the role of the other was related to higher levels of moral judgment. Ten subjects who scored low in the original study on both the role taking tasks and the moral judgment scale were followed up after one year. It was found that the development of the ability to take the role of the other is a necessary condition for the development of certain levels of moral thought.

The need to develop flexibility in problem solving: verbalizing alternatives to problems.

One of the findings of the Coleman report (Coleman, 1966) is that the pupil characteristic which appears to have the strongest relationship to school achievement is the extent to which a pupil feels that he has "control over his own destiny." Bruner (1971) claims that the major source of cognitive differences between good and poor learners is in the ways goals are defined and how problems are approached. Recent research on this topic (Shure and Spivack, in press; Shure and Spivack, 1970: Shure, Spivack, and Jaegar, 1972) supports the notion that the lower class child is relatively deficient in verbalizing relevant solutions to typical problems confronting him daily. Shure and Spivack (1970) reported data that indicated a relationship exists between problem solving, defined in terms of amount and variety of verbalized options to cope with peer and authority situations, and both socioeconomic level and school behavior adjustment in preschool children. For the peer problems, the general problem situation was the following: the examiner showed the subject three pictures, two of children and one of a toy, and then said that one child has been playing with the toy for quite awhile and now the other child wanted to play with the toy. The subject was to indicate what the one child could do or say so that he could have a change to play with the toy. The purpose of this problem situation was to determine how many alternatives a child could verbalize to this problem. New characters and a new toy were presented after each solution was given in order to maintain interest. The experimenter gave the problem situation a minimum of seven times and if seven different solutions were given, he continued to present the problem situation until the child was not able to verbalize more options. In the authority problem, the child was to describe ways to avoid his mother's anger for breaking her favorite flower pot. The same procedure was followed in that after one solution, new characters and a new act of property damage was presented. Children of low socio-economic status, in contrast to middle socio-economic status, gave fewer possible solutions to real life problems and gave fewer solution categories. In the middle class group those children considered less well adjusted by their teachers gave fewer possible solutions and fewer solution categories than children considered well adjusted. Shure and Spivack (1970) summarize the class differences by saying that

> lower class children may behave differently, not only because they conceive of different types of solutions, but also because they do not entertain a variety of possible alternative solutions that could be brought to bear on the situation (p. 7).

In further research (Shure, Spivack, and Jaegar, 1972) it has been found that elementary children's ability to berbalize alternative solutions to problems was directly related to teacher rated judgments of classroom behavior as measured by the Devereux Elementary Behavior Rating Scale (Spivack and Swift, 1967). Children who were apparently adjusted in their classrooms could think of approximately two more solutions to the problems presented by the investigators than aberrant youngsters. Less well adjusted youngsters also gave a higher percentage of forceful responses. Verbal output did not seem to be related to any particular group. According to this study, adjustment was not highly correlated with I.Q.

The implication from these studies is that classroom adjustment is related to the child's ability to describe alternatives to real life problem situations. However, this correlational relationship only implies that increasing a child's number of verbalized alternatives to problems will aid his classroom adjustment. An experimental study seems to be the next logical step to determine whether facilitation in verbalizing alternatives to problems affects classroom adjustment. One of the objectives of Project AWARE meetings is to facilitate the verbalization of alternatives to problems.

Summary

Research evidence suggests that the ability to "take the role of the other" develops between the ages of 6 and 9. Although there is generally a developmental trend, Flavell (1968) has noted wide variability in role taking even at some older ages. It is one purpose of Project AWARE to help each child become less egocentric so that he is able to view a situation from the standpoint of other persons and use this information to effectively interact with them.

The second major purpose of Project AWARE is to allow children to discuss alternatives to problems. Many disadvantaged children have been found deficient in verbalizing relevant solutions to everyday problems. Problem-solving sessions will be employed to encourage children to think of new possibilities for handling problems. The relationship between the ability to verbalize many alternatives to problems and classroom adjustment will be carefully analyzed.

Project AWARE differs from the other current programs in several respects. First of all, the principal investigator has chosen to concentrate on the acquisition of "role taking" since it appears from research evidence that this ability is developing rapidly during the 6-9 age period. Secondly, the principal investigator has also chosen to attempt to facilitate problem solving strategies since there appears to be a relationship between this ability and classroom adjustment. Finally, the principal investigator has incorporated a research design which controls for the teacher variable and the Hawthorne effect. Each grade has been divided into two groups; one group is presented with the AWARE programs and the other is presented with a health and growth program.

The target population for the fall of 1971 and the spring of 1972 has been the first, second, and third grade at the Center for Early Development and Education. Before school commenced, a brief overview of the program was discussed with the teachers in these rooms. It was explained to the teachers that each grade would be divided into two equal groups. One of the groups would be in the AWARE program and the other group would have the "Health and Growth" program from Scott Foresman, and Company. The teachers were told that the principal investigator would take the major responsibility for planning the AWARE programs and executing them with the children and another teacher would be responsible for the "Health and Growth" series.

The program began in September approximately one week after school was in session. The discussion meeting times have been in the afternoon because the teachers felt morning periods should be reserved for reading and arithmetic. The principal investigator and the teachers meet every Friday and discuss the meetings of the previous week and new programs and ideas are explained. In the future it is hoped that the teachers will play a significant role in the planning and conducting of the AWARE meetings.

Method

Subjects. Approximately 74 pupils, aged six to nine years of age, from The Center for Early Development and Education are serving as subjects.

Experimental Design. Thirty-four pupils are in the experimental group and approximately forty pupils are in the control group. All new entries into the school after December 1st have been placed with the control group. The two groups were initially formed on the basis of sex and race. An equal number of boys and girls and blacks and whites were placed in the experimental and control groups. Therefore, a representative sample of boys and girls and blacks and whites were placed in the experimental and control groups.

Procedure. Four days a week the principal investigator and the health teacher work with the children in the first, second, and third grade for 30 minutes each. The principal investigator works with each grade in their respective classroom and the health teacher works with the other half of each grade in a resource room in another part of the building.

AWARE Procedure. In the AWARE groups, rules were loosely formulated initially for the group meetings. The principal investigator presented these rules for the meetings--sitting quietly, listening to others, and taking turns. The children also added to the list and mentioned not fighting, or kicking others. Usually the principal investigator reviews these rules with the group daily. If each member of the group cooperates and remembers the rules, then each child is given a reinforcer at the end of the 30 minutes. At first stars were given for good behavior and the stars were placed on a clown, a turkey, and a Santa Claus. Later the children decided what they wanted for a reinforcer. After Christmas, children in the third grade group decided that candy should be the reinforcer for them when they had followed the rules. This was also the choice in the second grade. In the first grade the children decided they wanted to put stars on Easter eggs and Valentines and then later chose candy. Because there are siblings in different groups a competition has been set up between groups and each group is trying to do as well as others so that each member of the group receives a reinforcer. Apparently in the evenings there is a comparison on the activities and reinforcers between groups. On several occasions members of one group have asked to be able to engage in the activity that another group was doing.

The groups have been given essentially the same programs. For the older groups, however, the discussions are more controlled by the pupils. In the second grade, for instance, many group sessions have been spent on classroom problems. Several members of the second grade group have behavior problems and reasons for their behavior have been discussed with the whole group. There has also been concern in this group about fighting on the playground, writing words on the walls, and hippies. As the topics arise, they are discussed and supplementary material is brought in by the principal investigator. Approximately one third of the discussion topics have been decided by the second grade pupils throughout the year. In the other groups, topics have been determined by the principal investigator. The openness of the discussions depends on the composition of the group. Many children are able to think of relevant topics for AWARE sessions while others are not.

A general description of the topics for the AWARE sessions include:

I. Awareness and Understanding of Self (September, October, November, December)

These sessions focus on self acceptance and the development of the concept of self. Initially stories were read to the children which concentrated on the general idea that everyone has his strengths and weaknesses. Discussions around this topic followed each story. Throughout each story the investigator would stop and ask the children to speculate on what might happen in the story. During the discussions the children are asked to rethink the sequence of events, and to comment on the actions of the characters. In several instances, the children have role played the story and used the puppets as characters. After the story discussion, the children are encouraged to relate their own experiences that are similar to those of the story characters.

In order to develop the concept of self each child has made a "ME" book. The book contains a self portrait, a "ME" collage, and an individual photograph of each child. All of the work has been considered acceptable and no judgments have been made as to the quality of work. Discussions have been held so that the children could explain their "ME" collage; the instructions were to cut out pictures from magazines which were important and special to them.

Future expansions of this section will include a more detailed "ME" book for all groups. Activities connected with the book will hopefully stimulate the idea of self-identity and self-esteem. Each child will keep records of his development in all areas, i.e. a diary of accomplishments in the interpersonal area, records of school progress, etc. If possible, the book could be kept for the years that the child is in project AWARE so that he begins to understand his personal development.

II. Awareness and Understanding of Feelings (November, December, January, February)

These sessions have provided the children with opportunities to name, discuss, and explain their feelings. Initially the children were encouraged to describe how others felt in a situation. One activity has been to view photographs of people expressing feelings and the children have been asked to name the feeling and give a possible reason for someone feeling that way. Throughout all sessions if the occasion arises, feelings are discussed. For example, if one child refuses to sit by another in the group the parties involved are encouraged to discuss and explain their feelings and the feelings of the other child.

As the children have become more able to name many different feelings, stories were read to them and the characters' feelings were discussed at length. On many occasions the children have been encouraged to role play the story and to explain the feelings of the characters involved. Puppets have been used many times for the role playing. Several songs are being taught to the children and discussions of what the songs mean are being held. When it has been appropriate, the songs and stories are presented to the whole school at the assembly time.

For the two older groups, a feeling word game has been played. The principal investigator holds up a word card and if the child can guess the word, he is asked to show how someone would look if they felt that way and then to describe a time when he felt that way.

Throughout all these sessions the stress has been on the language of personal feelings. The children are always encouraged to communicate how they feel in words and to give reasons for the feelings. Hopefully through the group sessions on feelings, the children will see that feelings are universal and that their feelings are similar to other children.

III. Awareness and Understanding of Individual Differences (February, March)

The activities in this section are concerned with children seeing the significance of individual differences. First of all, the term "individual differences" has been explained by the teacher to the children. The children are encouraged to discuss ways of describing people by physical differences--skin color, height, eye color, hair color, hair texture, etc. There have been discussions and explanations on what these differences mean. The children have also been encouraged to discuss ways of describing people's personalities--the way people behave.

Stories have been told to the pupils which focus on individual differences. Discussions will follow about the significance of the individual differences in the stories. Songs will be taught to the children that deal with individual differences. Again discussions will be held to help the children see the meaning of individual differences.

Other discussion topics will include - what would happen if everyone looked the same, what things make us feel like everyone else, what things make us feel different from everyone else, etc. During several meetings the children will be asked to debate the statements--most people are alike, and most people are different.

After the concept of individual differences seems to be grasped, each child will be asked to fill out an inventory on his outside self--i.e. my name is--, I am a girl/boy, my skin color is--, my hair color is--, my eyes are--. Also each child will be asked to fill out an inventory on his inside self, i.e. I feel happy when--, I feel disappointed when--, etc. These will be discussed at length on an annonymous basis.

IV. Problem Solving (January, February, March, April, May)

This focus of this section is on understanding and thinking of alternatives to problems. The format has been and will usually be for the investigator to present some stimulus material (described below)--a problem situation--and allow the children to think and role play alternatives. This will provide the children an opportunity to "take the role of the other" in problem situations. The decision making process in the problem situation will help children to realize that studying a problem and taking time to evaluate all the elements involved will help them make wiser decisions.

Role playing solutions to problems will provide a situation where children can practice behavior under controlled conditions--and to see the consequences of actions without suffering the consequences of anti-social or dangerous actions; it gives them a second chance.

Typically the investigator will present a problem situation through a story, photographs of children engaging in certain behavior, puppetry, magnet board with paper dolls, etc. After the problem has been presented, the group will be asked to re-think the sequence of events, and define the problem; express how the people feel in the problem situation, explain the reasons for the feelings, role play the situation, discuss alternatives to the problem, role play the problem solutions; and role play the consequences to the solutions.

During the problem solving whether through discussion or role playing, the investigator will be non-judgmental and will try to encourage the children to verbalize the feelings of the characters, and to explore alternatives to problems.

Problem solving sessions [illegible] also be set up when problems arise in the group or with school-related activities. [illegible] children will be encouraged to bring problems to the group. Problems in group functioning will be discussed and alternatives suggested and tried.

Evaluation of Project AWARE

Hypotheses to be tested:

Role Taking:

1. When compared with normative data (Flavell, 1968) and the control group, the experimental children will more likely "take the role of the other." Two of Flavell's (1968) role taking tasks will be used to measure "taking the role of the other."

Alternatives to Problems:

2. Significant improvements in number and type of children's oral descriptions of alternatives to problems will be evidenced by the experimental group.

Classroom Adjustment:

3. The adjustment of the experimental group to the school environment will be facilitated as shown by ratings of the teachers.

Peer Adjustment:

4. Children in the experimental group will be more acceptant of peers than the control group as evidenced by choices on a sociogram.

Academic Achievement:

5. Children in the experimental group will show more achievement test gains than children in the control group.

Playground behavior:

6. Children in the experimental group will spend less time in physical aggression, verbal aggression, and isolation on the playground than the control group. Children in the experimental group will play in integrated groups by race and sex more than members of the control group.

Understanding of Social Interaction:

7. Children in the experimental group will be more able to interpret the feelings and thoughts of others than the control group.

Clinical Assessment:

8. Children in the experimental group will be considered more adjusted by a clinical psychologist than children in the control group.

All children who are participants in this study have been given the following measures as pretest measures:

role taking tasks
story alternatives
Devereux Elementary Behavior Rating Scale
sociograms
achievement tests
playground observations

In the spring of 1972 these measures will be readministered. Additional measures will include story interpretations and a clinical assessment.

The following section contains a description of the measures:

Role - Taking

Flavell (1968) devised several role-taking tasks in order to study the development of role-taking and communication skills in children. Two of these tasks were selected as measures of role-taking change. These two tasks were selected because they appeared to be assessing most directly role-taking behavior. These tasks were also selected by Selman (1971) in his recent paper concerned with role-taking behavior and moral development. In future expansions of Project AWARE other measures devised by Flavell (1968) will be used to assess role-taking and communication.

Role Taking Task #1. Two experimenters are in the room when the subject enters. Experimenter 1 shows the subject two cups. One cup has a nickel glued to its bottom and the other has two nickels glued to the bottom. Experimenter 1 shows the subject that under the nickel cup there is one nickel, and under the two nickel cup there are two nickels. Experimenter 1 explains the game to the subject. The subject is told that in a few minutes Experimenter 2 is going to leave the room and then come back and choose one of the cups. The purpose of the game is to try and guess which cup Experimenter 2 will choose and remove the money from that cup. Thus the child's task is to remove the money from either the two-nickel or one-nickel cup, whichever one the child expects Experimenter 2 will choose. The important thing for the child to remember is that Experimenter 2 knows that he is going to try to trick him. At this point Experimenter 2 leaves the room. The child chooses the cup he thinks Experimenter 2 will choose and gives his reasons as to why he feels Experimenter 2 will choose the cup. The responses to the questions posed by Experimenter 1 about the child's reasoning about Experimenter 2's behavior constitutes the dependent measure. After the questioning is completed Experimenter 2 returns to the room and makes a choice. The exact procedures are the following:

Setting: S sees before him two plastic cups, turned face down on a felt board. One has a nickel glued to its bottom (upturned) side and the other similarly displays two nickels. Both E's are initially present in the room with the child and E_1 instructs him as follows:

E_1 says: "Now here is a game. You see these two cups? One has one nickel stuck to the top and the other has two nickels stuck to the top (points). Now the money stuck to the top tells you how much money is inside. You see (lifts cups), one nickel under here and two nickels under here."

"I'll show you how the game works. First, I'll close my eyes and __________ (E_2) will take the money out of one of the cups but I don't know which because my eyes are closed" (E_2 then silently removes the money from the two-nickel cup).

"Now I'll open my eyes and choose one of the cups. Now, if I choose the one with the money still under it, I'll get that much money to keep. If I pick the one with no money under it, I wouldn't get any money to keep."

"Say I pick this one (picks up one nickel-cup). It has a nickel under it, so I'd get to keep a nickel. What would I get to keep if I'd picked the other one?" (IF S responds incorrectly, E_1 shows him.)

"Now say I close my eyes again and say he took away the money from the one-nickel cup (E_2 does this) and then, say, I choose the one-nickel cup, what would I get? And what would I get if I picked the two-nickel cup this time? You see how to play the game? Fine."

"Now ______________ (E_2), please leave the room. (E_2 leaves). Now you and I are going to play this game with ______________ (E_2). We'll take the money out of either the two-nickel cup or the one-nickel cup. Then she'll come back in and choose, and if she chooses right, she'll get some money to keep, either one nickel or two nickels; and if she chooses wrong, she won't get any money."

"Now, we'll try to fool her -- we'll try to guess which cup she'll choose and take the money out of that one. Now you think hard for a minute and see if you can guess which one she'll choose. Now of course, she knows we'll try to fool her; she knows we're going to try to figure out which one she'll choose. Which one do you think she'll choose -- think hard! (S indicates one of the cups). Tell me why you think she might pick that one." (E_1 tapes the response and writes it down also)

NOTE: (At this point E_1 encourages the child to introspect and give reasons but tries to avoid all leading or suggestive questions. The only questions to be asked are those which E_2 deems necessary to clarify for the tape record, which choice S made and its stated rationale.) The money is then duly removed from the cup S selected, E_2 returns to make his "choice" (actually made according to a preset pattern across S's), and either "wins" or "loses".

The scoring procedures are the same as used by Flavell (1968). Two people are scoring the children's responses and a reliability coefficient will be computed. The scoring procedures are the following:

Strategy 1

This category includes all S protocols which cannot be assigned to any of the three preceding categories. Almost all of these protocols were of either one of two types: (a) S cannot or will not impute a choice to E_2, despite E_1 's urging; (b) S attributes a choice to E_2 but is unable to offer any rationale for it.

Strategy 2

S asserts thats E_2 will choose a particular cup for one of two reasons: monetary and other. The former simply attrubutes a straight forward, greatest-financial-gain motive to E_2 and always predicts the choice of the two-nickel cup (that is, E_2 will choose that cup because it potentially yields the most money). The latter, as its name implies, covers all other strategies of the same general level; for example, E_2 is said to recall that cup X paid off frequently during the demonstration trails and thinks it is likely to continue to pay off now. The essence of Strategy A, whether monetary or other, is that it seems to attribute to E_2 nothing beyond cognitions and motives which bear on the game materials themselves, that is it does not take into account any cognitions which E_2 might have about S's behavior in the role of E_2's opponent. The following is a protocol scored as Strategy A (monetary type):

"Do you want me to tell you?" (Umhum. Which one do you think he'll choose?) "The dime." (You think he'll choose the dime cup. Why do you think he might choose that one?) "Hel'll get more money - if the money is under there."

Strategy 3

S begins with a prediction about E_2's motives and response dispositions (eigher monetary or other), just as the Strategy A child does. But unlike the latter, he then goes on to attribute additional cognitions to E_2: the recognition that S may have predicted precisely these intentions and that he, E_2, had therefore better change his choice, for example, from the two-nickel cup to the less remunerative, but perhaps surer one-nickel cup. Here is an example:

(S chooses the one-nickel cup.) (Why do you think he'll take the one-nickel cup?) "Well, I figured that, uh, if it was me I'd take this one (two-nickel cup) because of the money I'd get to keep. But he's gonna know we're gonna fool him--or try to fool him--and so he might think that we're gonna take the most money out so I took the small one (the one-nickel cup), I'd go for the small one."

Strategy 4

This category includes all imputed E_2 strategies which are analogous to

Strategy B, but are carried one or more steps further. Having first reasoned according to Strategy B, for instance, S might take the future inference that E_2 will predict this reasoning, too, and will consequently shift back again to his initial choice in order to combat it (for example, pick the two-nickel cup after all). The judge felt that this interesting protocol deserved a Strategy 4 scoring (other type):

"Uh, when we were, he chose the dime cup the first time . . . and uh well, let's see . . . I think uh that he would, I think that he would think that we would choose the opposite cup." (Opposite cup from what?) "From the, in other words this cup, the nickel cup, but then might, he might, he might feel that we, that we know that he thinks that we're going to pick this cup so therefore I think we should pick the dime cup, because I think he thinks, he thinks we're going to pick the nickel cup, but then I think he knows that we, that we'll assume that he knows that, so we should pick the opposite cup." (Okay, so we should pick the dime cup?) "Yes."

Flavell, 1968, p. 46-47.

Role Taking Task #2. Two experimenters greet the child when he enters the room. Experimenter 2 then leaves the room. Experimenter 1 places before the child an ordered series of seven pictures showing a story of a boy being chased by a dog, running down a street, climbing a tree to eat an apple as the dog trots away. Experimenter 1 asks the child to tell him what story is told by the pictures. If the child has difficulty Experimenter 2 helps him by going over the action in each picture. Each child is to tell a story about the boy walking down the sidewalk, being chased by an angry dog, and climbing a tree where he finds an apple and eats it. Then Experimenter 1 removes three of the pictures. The three pictures that are removed from the series eliminate the fear of dog motive for climbing the tree; the dog is still in the story but is not seen chasing the boy up the tree. The other experimenter (2) is then asked to return to the room. Experimenter 2 then asks the child what story the four pictures tell him. The child is thus requested to tell a story that Experimenter 2 would tell by seeing only the four pictures. After telling the new story that he thinks Experimenter 2 would tell, Experimenter 1 asks the child why Experimenter 2 would think the boy climbed the tree and what Experimenter 2 would think the dog is doing in the last picture. Thus the child is being asked to take the role of Experimenter 2 and tell the story from Experimenter 2's perspective. The exact procedures are the following:

Setting: E_1 and E_2 greet the S. E_2 then leaves the room. S sees before him, after E_2 has left, seven picture cards.

E_1 says: "She (E_2) has left the room and she won't be able to see what we are going to do, will she? Here is a series of seven pictures which tell a story, just like the comics in the newspaper."

(The cards are then placed in proper sequence on the table.) "You tell me what's going on. Begin here at the beginning."

(If the child failed to indicate these things in his narration, he was asked why the boy climbed the tree and what he was doing in the last picture. The story should go something like this: A vicious dog chases a terrified boy who finds refuge by climbing a handy tree; once secure there, and with the dog abandoning the chase, he takes advantage of the kind of tree he happens to be in and eats an apple.)

"That's fine. Now ________________(E_2) hasn't seen any of these pictures. I'm going to call her back into the room and show her just these four pictures (cards 1, 4, 6, and 7). I want you to pretend you are she, and tell the story that you think she would tell."

"Okay" (Calls in E_2). "Now (speaking to E_2) these pictures tell a story."
(E_2) then addresses S and says:) "What story do these pictures tell me?"

Again, if S failed to clarify these matters spontaneously in the course of his story, he was asked: "Why does she (point to E_2) think the boy climbed the tree?" Or: "What does she think about that dog there" (card 6) "What does he think the dog is there for?" (E tapes the response and writes it down also.)

The scoring procedures are the same as used by Flavell (1968). Two people are scoring the children's responses and a reliability coefficient will be computed. The scoring procedures are the following:

Strategy 1

When asked to predict the story E_2 would tell, S gives a more or less straightforward presentation of the "correct" four-picture story, that is, the boy is said to climb the tree in response to some non-fear motive (almost always to get an apple) and the dog is said not to be a motive for climbing (is said to be irrelevant to the story, "just walking along, etc.). If these curcial points had not been mentioned spontaneously during the narration proper, they were readily given during the brief inquiry afterwards. Here is an example:

"Apparently the boy is just walking down the sidewalk and, uh, he sees the apples on the tree in this case and he goes to climb 'em. And the dog in this case would be just, uh, a passerby and he's just eating the apples. He just climbed the tree to eat the apples."

Strategy 2

All responses not scorable for the previous three categories were assigned to this one. It was not simply a "wastebasket" category, however. In most cases, it subsumed stories in which (in narrative or in inquiry) some sort of fear motive is introduced, as in Categories 3 and 4, but the child also says something which bespeaks some recognition by the child that E_2 is operating from the four-picture sequence only, that is, something which suggests at least a modicum of sensitivity to the role-taking aspects of the task. He might, for instance, include expressions like, "he could tell from these pictures that . . ." or S might attempt to rationalize the fear motive on the basis of what E_2 might infer, for example, "he's running to the tree and there's a dog here, so he was probably afraid of the dog." As a third example, he might even substitute some other fear stimulus for the dog ("he's afraid of a ghost or something"), perhaps as a kind of "compromise" between his and E_2's perspective. Although some responses of uncertain maturity level surely found their way into this residual category, the modal response here appeared to us to show evidence of more role-taking activity than those scored for Strategies 3 and 4.

Strategy 3

Although the fear-of-dog motive is not explicitly mentioned during the narration, it is readily supplied during the inquiry. In most cases so scored, the narration is a bare account of the boy's action, devoid of motivational statements of any kind. But when E_1 subsequently asks why E_2 thinks the boy climbed the tree, the usual response is the flatly given, "because the dog chased him." Although categorized separately, we would not try to defend the position that these responses really represent a higher performance level than the preceeding ones. The absence of a spontaneously given fear-of-dog motive here seemed in most cases to be due to an indisposition to make spontaneous motivational inferences in general. Here is an example of a Strategy 3 response:

"He's singing and, then he runs, he sees a tree. He climbs up it and he's eating an apple." (Fine. Why does Mr. Wright think that the boy wanted to climb the tree?). "So the dog don't get him -- bite him."

Strategy 4

S gives a more less straightforward presentation of the seven-picture story rather than the four-picture one. That is, the dog is clearly established as the motive for climbing the tree during the narration proper, prior to inquiry. For example:

"Well, he's walking along with a stick. I mean should I say what-um-um? (You would say - you want to say just what Mr. Wright would say, don't you?) "He's walking along with a stick, and the dog's gonna chase him so he runs - he goes up the tree with his stick. The dog's walking away and while he was there he's eating an apple.

Flavell, 1968, p. 72-73.

Alternatives to Problems

Stories were developed by the principal investigator to determine how many alternatives to problems a child can verbalize. The rationale for this type of measure came from the work of Shure and Spivack (Shure & Spivack, 1970; Shure & Spivack, 1971; Shure, Spivack, & Jaegar, 1972). Generally, they have found that children who think of many options to problem situations are children who are perceived by their teachers as well-adjusted on the Deverux Elementary School Behavior Rating Scale. Shure and Spivack have only used two problem situations in their studies. It was felt that a number of problem stories needed to be presented to the children in the present study in order to receive a representative sample of the children's ability to verbalize alternatives to problems.

The following stories were devised by the principal investigator:

1. The boy sitting next to you in class, leans over and tells you that he is going to beat you up after school. What could you do?
2. You are on the playground and a kid from the sixth grade begins to tease you and hit you. What could you do?
3. You are playing ball on the playground with your friends. Another boy/girl comes up to you and says he/she wants the bat and starts to grab it from you. What could you do?
4. The teacher thinks that you are cheating on a test and you feel that you didn't cheat. What could you do?
5. Your best friend is walking through the hall and another kid pushes him. The two kids begin fighting. You see the fight. What could you do?
6. Your mother becomes angry with you because she thinks you took some money from her purse, but you didn't. What could you do?

These stories were given to a middle-class sample of pupils in order to set up scoring categories. As of the present writing, work has not been completed on the categories to be used.

Classroom Adjustment

The Devereux Elementary School Behavior Rating Scale was devised by Spivack and Swift (1967) as a measure of classroom adjustment.

More specifically, the scale was devised as:

(a) a means of identifying and measuring those classroom behaviors that may be interfering with achievement

(b) one element in a total educational "diagnosis" of a child with a learning problem

(c) an ongoing school record of classroom behavioral adjustment

(d) to measure change in behavior through time as a function of any remedial program

(e) a standard form of communication from the teacher to school administrators or other professionals who may be involved with a child

(f) an aid in group placement of children in classes

(g) as a research device for those who wish a reliable measure of behaviors that appear in the classroom setting and are related to learning. (Spivack & Swift 1967a, p. 3)

The DESB has been filled out by the classroom teacher. Each teacher using the scale has been familiar with the student; familiarity is defined as having the pupil in class for one month. The 47 items on the scale have been grouped into 11 behavior factors and three additional items (Spivack & Swift, 1967b). The factors were determined by factor analyses.

Norms and test-retest reliabilities have been obtained and profiles of academic achievers and underachievers studied. In a recent study (Swift & Spivack, 1969) it was found that underachieving children displayed significantly different behavior patterns from their more successful peers as measured by the Devereux. It was found that 63% of the underachievers and 9% of the achievers were deviant on four or more factors of the DESB. Additionally 85% of the underachievers were having difficulty in three different areas as measured by the DESB.

The instrument was chosen as a device for measuring behavioral adjustment in the classroom. Also it is hoped that the relationship between verbalizing alternatives to problems and classroom adjustment can be studied more fully. The data of Spivack and Shure is suggestive that the ability to verbalize alternatives to problems is a necessary step for insuring classroom adjustment.

Peer Adjustment

Kohlberg, LaCrosse, and Picks (1970) have reviewed the literature on predictors of adult mental illness and have concluded that one of the best predictors of good mental health is how a child is liked and accepted by his peers.

A sociogram was chosen as a measure of the effectiveness of theprogram because it was felt that choices on a sociogram would reflect each child's ability to accept individual differences and understand others in his classroom. It would also give information on how each child was perceived by others.

The measure chosen was the Birthday Test, developed by Northway, Weld, & Davis (1971).

The procedure is to ask each child whom he would invite to his party and then a series of six situations is presented and his choices of whom he would like to share certain experiences is recorded. The data will be analyzed according to how many choices the child makes, his choices of adults or children, boys or girls, blacks or whites, and neighbors, classmates, or siblings.

The procedure is the following:

The experimenter says to the subject

"Let's pretend that you are having a birthday. You are going to the country for a picnic for your birthday treat, and you can invite people to go with you. These people can be children and grown-ups.

I. Think of all the children you know at home, or at shcool, or in the neighborhood, or anywhere else. Which children would you most like to invite? (After child has named a few, say, "Anyone else?")

II. The grown-ups can be any grown-ups you know and want to invite; grown-ups you know at home or at school or in your neighborhood, or anywhere at all. If you want to have your mother and father, be sure to choose them. Who are the grown-ups you are going to ask? (After child has named a few, say, "Anyone else?")

THE PICNIC

(1) All the children and grown-ups meet at your house. To get to the picnic, you are going in two taxis. Since it's your birthday, you are going in the first taxi. You sit in front with the taxi driver. There is room for other people in your taxi. Who would you like to come with you in your taxi? (unlimited)

____

____

____

(2) When you get to the picnic spot, you all decide to go exploring. Everyone wants to know what the place is like. So, you decide that some will walk up the river and some down. You want to go up the river because it looks exciting. You can choose anybody there to go with you. Who would you choose? (unlimited)

____

____

____

(3) When you come back, you all tell each other about the interesting things you saw. Then you decide that you will have a game of ball. You brought your ball with you, but you can't remember where you put it. Who are you going to ask to help you find it?

____

Suppose that person is busy and can't come. Who would you ask next?

____

Suppose that person also couldn't come. Who would you ask next?

____

(4) Now it's time for supper. There are two small tables at the picnic grounds. You are going to sit at one and invite anybody there to sit with you. Who would you ask? (unlimited)

____

____

____

(5) After you have had all the good things to eat and cut the birthday cake and opened your presents, you decide that you will walk over the fields toward a farm house by yourself. After you have crossed a field, you find you have to get over a fence. So you climb it, but you get stuck and can't get off. So you call to someone to come help you. Who would you call?

____

Suppose that person didn't hear you, who would you call for next?

____

And suppose that person didn't come, who would you call for next?

____

(6) So they help you get off the fence, and everything is all right. When you get back to the picnic place, you find that it is getting dark. Soon the taxis come to take you home. You are tired now, and you feel as if you had eaten too much birthday cake, and you hope maybe you can go to sleep on the

way home. You get into your taxi, and you choose the people who will ride in the taxi with you. Who do you want to ride with you? (unlimited)

____

____

____

When you get home, everybody wishes you many happy birthdays, and you think it was the nicest birthday you ever had."

Academic Achievement

First grade. The children in the first grade were given the Metropolitan Reading Readiness Test in the fall and will be given the Metropolitan Achievement Test, Primary 1, Form F, in the spring. Differences between experimental and control groups will be compared by gain scores (percentile rank charges) on the basis of their scores in the fall and spring.

Second grade. The children in the second grade were given the Metropolitan Achievement Test, Primary 1, Form F, in thespring of 1971 and will be given the Metropolitan Achievement Test, Primary 2, Form F, in the spring of 1972. Differences between experimental and control groups will be comapred. Gain scores (percentile rank changes) will be compared for the experimental and control groups on the basis of their scores on the two measures.

Third grade. The children in the third grade were given the Metropolitan Achievement Test, Primary 2, Form F, in the spring of 1971 and will be given the Iowa Test of Basic Skills, Grade 3, in the spring of 1972. Differences between experimental and control groups will be compared. Gain scores (percentile rank changes) will be compared for the experimental and control groups on the basis of their scores on the two measures.

Playground behavior

Each child was observed for five minutes on the playground. The observation was a behavior sample; every 30 seconds the child's behavior and the composition of his play group was recorded.

The data was collected in the fall of 1971. Four categories of play were recorded:

Physical aggression--child engaged in non-playful hitting, kicking, etc.

Verbal aggression--child called another names, shouted obscenities, or argued angrily

Non-Aggression--child played interactive games and activities with others

Isolation--child was by himself and was not interacting with others

The composition of play groups was also recorded (number of blacks and whites, number of boys and girls).

Four observers established a reliability of over .80 for at last 12 observations before they observed a child independently.

The questions to be answered by the observations are:

What per cent of time is spent in physical aggression, verbal aggression, non-aggression, and isolation?

Are play groups integrated by race and sex?

Understanding Social Interaction

Each child will be told a story in the spring of 1972. After the story is told, each child will be measured on his ability to interpret the feelings and actions of the characters.

The story has not been selected.

Clinical Assessment

During the last month of school a clinical psychologist will be asked to rate each child on his adjustment in relation to other children. The rating scale to be used has not been devised as of the writing of this paper.

Future Plans for Project AWARE

Project AWARE meetings will be expanded into the five-year-old room, the fourth grade, and the fifth grade. One half of each group will be presented with the AWARE programs and the other half of the group will be given another program, i.e. health, social studies, etc.

The principal investigator will be in charge of coordinating the effort at all levels--five-year-olds, Primary I,II,III and the Primary fourth and fifth grades. A research assistant will be selected and trained to work with two of the groups; the principal investigator will work with four groups.

The evaluation of the program with the new groups will follow the same lines as the present study. There will be further expansion of role taking assessment at all levels. New measures will include communication measures for the fourth and fifth grades. Also The Tasks of Emotional Development; a projective test, (Cohen and Weil, 1971) will be used to assess the emotional and social adjustment of children in the Primary I-III, and fourth and fifth grades.

References

Bessell, H. *Methods in human development: theory manual*. San Diego, California: Human Development Training Institute, 1970.

Bessell, H., and Palomares, U. H. *Human development program*. Los Angeles: Vulcan Binders, 1969.

Bloom, B. *Stability and change in human characterisitcs*. New York: Wiley, 1964.

Borton, T., and Newberg, N. That's not a cancer; that's a school system. Written at the request of the Division of Compensatory Education, United States Office of Education (OEC-1-70-5062) and published under OSOE auspices, 1970.

Bruce, P. A study of the self-concept in six grade children. Unpublished doctoral dissertation, Department of Child Welfare, State University of Iowa, Iowa City, Iowa, 1957.

Bruner, J. S. *The relevance of education*. New York: W. W. Norton & Company, 1971.

Caldwell, B. M. A timid giant grows bolder. *Saturday Review*, February 20, 1971.

Cohen, H., and Weil, G. R. *Tasks of emotional development*. Lexington, Mass.: Lexington Books, D. C. Heath and Company, 1971.

Coleman, J. S. *Equality of educational opportunity*. Washington, D. C.: U. S. Government Printing Office, 1966.

Cowen, E. L. The effectiveness of secondary prevention programs using non-professionals in the school setting. Proceedings, 76th Annual Convention, APA, 1968, *2*, 705-706.

Cowen, E. L. Emergent approaches to mental health problems: an overview and directions for future work. In E. L. Cowen, E. A. Gardner, & M. Zax (Eds.), Emergent approaches to mental health problems. New York: Appleton-Century-Crofts, 1967.

Cowen, E. L., Door, D., Izzo, L. D., Madonia, A., and Trost, M. A. The primary mental health project: A new way to conceptualize and deliver school mental health service. *Psychology in the Schools*, 1971, *VIII*, 216-225.

Dinkmeyer, D. Top priority: Understanding self and others. *The Elementary School Journal*, 1971, *72* (2), 62-71.

Flanders, N. A., and Amidon, E. J. The role of the teacher in the classroom. Minneapolis, Minnesota: Minneapolis Association for Productive Teaching, 1967.

Flapan, D. *Children's understanding of social interaction*. New York: Teachers College Press, Columbia University, 1968.

Flavell, J. *The development of role-taking and communication skills in children*. New York: John Wiley & Sons, Inc., 1968.

Glasser, W. *Schools without failure*. New York: Harper and Row, 1969.

Griggs, J. W. Teaching of ERC psychology programs spurts ahead in Council Schools. *ERC Reports*, 1970, *6*, 8-10.

Griggs, J. W., and Bonney, M. E. Relationship between "causal" orientation and acceptance of others, "self-ideal self" congruency and mental health changes for fourth and fifth grade children. *The Journal of Educational Research*, 1970, *63*, 471-477.

Holt, J. *How children fail*. New York: Dell Publishing Co. 1964.

Illich, I. The alternative to schooling. *Saturday Review*, June 19, 1971, 44-48, 59-60.

Kellam, S. G., and Schiff, S. K. The Woodlawn Mental Health Center: A Community Mental Health Center Model. *The Social Service Review*, *40* (3), September 1966, 255-263.

Kellam, S. G., and Schiff, S. K. Adaptation and mental illness in the first-grade classrooms of an urban community. Psychiatric Research Report 21, American Psychiatric Association, April 1967a.

Kellam, S. G., and Schiff, S. K. The origins and early evolution of an urban community mental health center in Woodlawn. In L. Duhl, and R. Leopold (Eds.), *Casebook of community psychiatry*. New York: Basic Books, 1967b.

Kellam, S. G., and Schiff, S. K. An urban center in Woodlawn. In L. J. Duhl, and R. L. Leoplod (Eds.), *Mental health and urban social policy.* San Francisco: Jossey-Bass, Inc., October, 1968.

Kohlberg, L. The development of children's orientation toward a moral order, I: Sequence in the development of moral thought. *Vita Humana*, 1963, *6*, 11-33.

Kohlberg, L., LaCrosse, J., and Picks, D. The predictability of adult mental health from childhood behavior. In B. Wolman (Ed.), *Handbook of child psychopathology*. McGraw Hill, 1970.

Levitt, E. B. Effect of a "causal" teacher-training program on authoritarianism and responsibility in grade school children. *Psychological Reports*, 1955, *4*, 457.

Long, B. E. Creative human development as a school curriculum. Paper presented at American Orthopsychiatric Association, 1971.

Muus, R. E. The relationship between "causal" orientation, anxiety, and insecurity in elementary school children. *Journal of Educational Psychology*, 1960, *51*, (3), 122-219.

Newberg, N. A. The impact of affective education in the Philadelphia School System. Unpublished paper, 1969.

Northway, M. L., Weld, L., and Davis, M. *The birthday story*. A measure of children's preferences for adults or contemporaries. Personal communication, 1971.

Ojemann, R. H. Changing attitudes in the classroom. *Children*, 1956, *3*, 130-134.

Ojemann, R. H. (Ed.) Four basic aspects of preventive psychiatry: report of the first institute on preventive psychiatry. State University of Iowa, 1957.

Ojemann, R. H. The human relations program at the State University of Iowa. Personnel and Guidance Journal, 1958, November, 199-206.

Piaget, J. The language and thought of the child. New York: Meridian Book, The World Publishing Company, 1969.

Piaget, J., and Inhelder, B. The child's conception of space. London: Routledge and Kegan Paul, 1956.

Schiff, S. K. Community accountability and mental health services. Mental Hygiene, 54 (2), 1970, 205-214.

Schiff, S. K. Personal communication, APA, 1971.

Selman, R. L. The relation of role taking to the development of moral judgment in children. Child Development, 1971, 42, 79-92.

Shure, M. B., and Spivack, G. Problem solving capacity, social class and adjustment among nursery school children. Paper presented at Eastern Psychological Association, Atlantic City, April 1970.

Shure, M. B., and Spivack, G. Means-ends thinking, adjustment and social class amont elementary school-aged children. Journal of Consulting and Clinical Psychology, in press.

Shure, M. B., Spivack, G., and Jaeger, M. A. Problem-solving thinking and adjustment. Child Development, 1972, in press.

Silberman, C. E. Crisis in the classroom. New York: Random House, 1970.

Spivack, G., and Swift, M. The Devereux Elementary School Behavior Rating Scale Manual. The Devereux Foundation, Devon, Pa., 1967. (a)

Spivack, G., and Swift, M. The Devereux elementary school behavior rating scale: a study of the nature and organization of disturbed classroom behavior. Journal of Special Education, 1967, 67-90. (b)

Stiles, F. S. Developing an understanding of human behavior at the elementary school level. Journal of Educational Research, 1950, 43, 516-521.

Swift, M., and Spivack, G. Clarifying the relationship between academic success and overt classroom behavior. Exceptional Children, 1969, 36, 99-106.

Wallach, M.A. Research on children's thinking. In H. W. Stevenson, et al. (Eds.), Child psychology: 62nd yearbook of the National Society for the Study of Education. Chicago: University of Chicago Press, 1963, 236-276.

THE LANGUAGE EXPERIENCES AND ACTIVITIES PROJECT

Richard Elardo

Introduction

This paper represents an attempt to review and summarize current theory and research on child language acquisition for the purpose of deriving implications for educational practice. It also is a progress report on project LEAP (Language Experiences and Activities Project), which was designed to incorporate some of the above implications in an experimental language training curriculum for two- and three-year-old day care children.

A considerable amount of this paper will be devoted to explicating a rationale for the language experiences provided in project LEAP. As Brottman (1968) noted in his monograph on language remediation for the disadvantaged preschool child, rationales underlying the then existing language programs for disadvantaged children were not readily apparent and it was necessary to infer them from the methodology employed. One underlying rationale, structure vs. non-structure, received the most discussion in Brottman's monograph. While this dimension is certainly relevant, it does not answer the question of what the focus of a language program should be. The following discussion is directed to this topic.

The Acquisition of Grammar

One aspect of language which might serve as the focus of a compensatory program is grammar. The question of whether or not disadvantaged children suffer from deficits in grammatical ability is a complex one, which requires a distinction between competence and performance. According to Chomsky (1965), competence refers to the speaker-learner's intrinsic knowledge of his language. Linquists work chiefly in this domain as they attempt a characterization of a set of rules that express this knowledge of a language. The descriptive research strategy of the grammarian has been outlined recently by Shulman (1970). He explained that when a linguist confronts the problem of writing a new grammar, he generally begins by collecting a large corpus of speech from informants who are designated a priori as "native speakers" of that language. The assertion is then made that the speakers' capacities to perform the operations of speaking and hearing their language rests upon the internalization of an underlying system of rules. These rules are usually said to be known tacitly or unconsciously and are said to constitute the grammatical competence of the speaker. Once the linguist has collected his corpus of speech, his task is then to analyze it carefully in order to discover and make explicit that underlying rule system which is called the grammar of that language (Chomsky, 1965).

Performance, on the other hand, refers to the use of language in actual situations. Here the rules contained in a theory of competence are said to operate to produce and to understand actual utterances, with factors such as memory span and social context playing a role.

The nativist position. Linguists such as Chomsky (1957, 1965), Psycholinguists such as McNeill (1970), and Menyuk (1969, 1971) have, within the framework of Chomsky's generative grammar, attempted to describe what rules of grammar the child acquires. Their studies are typically observational and consist of analyses of children's verbalizations at various ages. However, these students of language have not been content to describe only what it is that children acquire when they learn language, but they have also theorized about the ontogenesis of language. In general, their position on language acquisition can be considered to be the modern outgrowth of classical rationalism, in that they regard as important intrinsic structures in mental operations and tend to support notions of innate ideas and principles in learning. Chomsky's (1957, 1965) theories of language acquisition have followed this tradition. He has attempted to explain how children who are only four years of age have the competence or theoretical capacity of generate an infinite number of novel sentences. According to Chomsky, this competence in innate, is not a product of learning, and consists of an intuitive, tacit, and unconscious grasp of the rules by which sentences are properly generated. Because all normal children acquire essentially comparable grammars of great complexity with remarkable rapidity, Chomsky reasons that human beings are somehow specially designed to do this and that they are born with a 'data-handling' or 'hypothesis-formulating' ability of unknown character and complexity. He discussed the form of a "Language Acquisition Device" (LAD). This hypothetical construct was said to receive primary linguistic data (a corpus of speech from fluent speakers) as input, and to have grammatical competence as output. Diagrammatically:

$$\text{Primary Linguistic Data} \longrightarrow \boxed{\text{LAD}} \longrightarrow \text{Grammar}$$

In this manner, the child's knowledge of basic grammatical relations is hypothesized by Chomsky to be part of an innate linguistic capacity.

The linguistic-psycholinguistic position on the contribution of experience to language acquisition has been summarized by McNeill (1970). Focusing on the acquisition of grammar, McNeill relates that what is known is largely negative: "Learning does not take place through imitation; overt practice with linguistic forms does not play a role" (p. 105).

In explaining the psycholinguistic position, he states that while children imitate the speech of adults, this does not mean that the process of acquisition is imitation. Similarly, overt practice on the part of the child is not felt to be essential to the development of a more advanced grammar, due to studies such as the one by Ervin (1964). In her investigation of structural changes in children's language, she noted that the regular past-tense inflection in English was rare in the children studied, and that it appeared first on the frequent strong verbs. However, in spite of the fact that their verbs had been used for months with their correct irregular inflections, they were swept away by the appearance of the regular inflection as a rule of the child's grammar.

Psycholinguists have criticised learning theorists regarding the proper interpretation of reinforcement in language acquisition. Assuming the commonly accepted notion that parental approval often functions as a reinforcer for various behavior of young children, Brown, Cazden and Bellugi (1968) examined their records and recorded all instances of approval that occurred with their three subjects. They found that approval was actually contingent on the truth value of a child's statement, and not upon its grammatical form. For example, a child who said "That's Popeye's" would be told "No" if it was Mickey's, but could say under the same circumstances "That Mickey" and be told "Yes." Someone has pointed out that in light on these circumstances, it is amazing to note that children grow up to speak grammatically, but not necessarily truthfully!

Presently, there seems to be partial agreement (an exception will be cited below) that in terms of basic syntactic competence, disadvantaged children are not significantly different from middle-class children. This conclusion may be drawn from studies by Cazden (1965), Shriner & Miner (1968), and Baratz (1968). Cazden (1967) concluded that children's syntactic development does not appear to be sensitive to differences in the quality of their mother's speech after an examination of the acquisition of noun and verb inflections, and, similarly, La Civita, Kean and Yamamoto (1966) reported that seven-, nine-, and eleven-year-old children from divergent social classes registered no differences in knowledge of several grammatical rules.

Data provided by Osser (1966) appear to be discrepant with that just cited. Osser studied the speech of twenty "grossly deprived" Negro five-year-olds in Baltimore and performed a transformational analysis identical to that of Menyuk (1961, 1963). He found that his subjects exhibited a much narrower range of syntactic structures than did Menyuk's white middle-class children of Brookline, Massachusetts. He also discovered extreme individual differences within the group observed, Osser concluded that theoretical positions which downgrade environmental factors in favor of maturational factors in language development must take account of certain very great intragroup and intergroup differences in language patterns. Nevertheless, those of the linguistic-psycholinguistic position maintain that the majority of evidence supports their contention that language acquisition and development occur because the child brings sufficient innate conceptual capacities to the language learning situation, and then uses experience (language input) solely to eliminate his false hypothesis about the rules of language. Furthermore, they believe that there are no important differences among children of different social classes with respect to the rules that comprise their grammatical competence or in the speed with which children acquire these rules. A study of the evidence on this topic has convinced both Plumer (1970) and Moore (1971) that differences in syntactic competence are not important barriers to communication for the young disadvantaged child and should not be the focus of preschool language training.

Dialect Differences

Another aspect of language which could serve as a focus of a preschool language program is dialect. Recently much attention has been devoted to the question of whether or not nonstandard Negro English is in some way linguistically deficient when compared to standard English (see Baratz & Baratz, 1970). If so, then perhaps language programs should attempt to change the Black preschool child's dialect.

Currently debated as the "deficit-difference controversy" (see Williams, 1970), the issue involves those who on the one hand view the language of the poverty child as deficient, (Keutsch, 1965; Hess & Shipman, 1967; Bernstein, 1965; and Bereiter & Engelmann, 1966) and those who on the other hand feel that much language should rather be termed "different" (Stewart, 1965; Labov, 1970; Shuy, 1970). This latter group, comprised of linguists and sociolinguists, admonish the others that speech variations among groups of people should not be assumed to be variations in linguistic complexity, sophistication, or development and that such variations instead reflect distinctions among quite normal and well-developed, but different, linguistic or dialect systems. As williams (1970) observed, the deficit portion puts the onus of the poverty problem on the poor, whereas the difference position puts the onus on all of society in the sense of discrimination. Many complicated issues are obviously involved in this controversy. One involves a possible confusion of cognitive deficits with linguistic differences. Frequently, the disadvantaged Black child comes from such an unstimulating environment that he lacks the cognitive functions of language even in his own dialect.

One can, of course, accept the notion that the speech pattern of certain groups may not necessarily be deficient, but nevertheless believe that they should be changed to approximate the patterns of standard English for other reasons -- i.e., the chance for increased social mobility in a predominantly white-middle-class society. Attempts to alter non-standard dialects, however, have consistently failed (Cohen, 1966; John, 1967). In one attempt, perhaps the most intensive and long-term effort to alter dialect (three years), Lin (1965) worked with college freshmen four days a week, employing tapes, role playing, and other supplementary materials for pattern drill, largely on noun and verb inflection and agreement. Results were inconclusive, but Lin admitted that a nine-month period was insufficient to produce a single completely bidialectical student. In terms of the much younger preschool Black child, who is likely to be even less motivated than Lin's freshmen to alter his dialect, it appears that constant dialectical "correction" is quite likely to lead to frustration.

As Horner (1968) cautioned, a danger inherent in continuous "correction" of speech is that effort is wasted on form at a time when it is far more important to help the child become proficient in the use of language. Therefore, it must be concluded that preschool language programs for the disadvantaged should not focus on altering dialects. This does not mean, however, that programs in elementary school should necessarily refrain from attempts to produce bidialectical students. After all, many elementary school pupils learn more than one language, which appears to be a more difficult task than mastering two dialects of the same language.

Cognitive Aspects of Language

Another aspect of language which could serve as the basis for a preschool language program is cognitive in nature. Adherent of Piaget's position (see Sinclair-de-Zwart, 1969) prefer to conceptualize language as an aspect of cognition and refer to it as only one part of a totality within the symbolic system. Piaget is said to believe that language is not the source of logic, but rather is structured by logic. Thus, intelligence is not viewed simply as a set of linguistic structures. Studies supporting Piaget's hypothesis (Hatwell, 1964; Voyat, 1970) indicate that an emphasis on the cognitive aspects of language is desirable in preschool language programs. Several studies (Jeruchimowicz, Costello & Bagur, 1971; John, 1963; Templin, 1957) have indicated that disadvantaged children are more likely to obtain lower vocabulary definition scores than middle-class children, and some recent preschool language programs (Engelmann, Osborn & Engelmann, 1969; Blank & Solomon, 1968) have attempted to concentrate on the cognitive-linguistic-semantic aspect of language discussed here.

While these attempts will not be critiqued here, further delineation of Piaget's position may enable the reader who is familiar with them to devise his own critique. Piaget would view the vocabulary problems of the disadvantaged child as arising from a lack of social experience: this is derived from his view that language is a part of overall intellectual activity. The implication for education to be drawn from this notion, according to Furth (1966), is that schools should strengthen the foundations of thought upon which any particular learning is based. This implies that preschool language programs should make provision to not simply teach words, but _concepts_. Voyat (1972), in a discussion of thinking before language, feels that caution must be exercised in the teaching of vocabulary. He does not question the teaching of words, but rather their _premature imposition_ upon the child before he has acquired the concepts that underlie them. In terms of the proper pedagogy for preschool vocabulary training, as far as logical concepts are concerned, the implication is that the child should be allowed to act upon the environment and not simply engage in passive listening. This will enable the child to structure his actions on objects in such a way that the logical process, and thus the linguistic process, will be meaningfully enhanced.

Functional Aspects of Language

Bernstein (1965) described the linguistic backwardness of lower-class children not in terms of their basic competence, but rather in terms of functional or performance handicaps. He believes that the cognitively simpler demands for communication in lower-class environments leads to the development of a restricted language code. He stated, "The most general condition for the emergence of this code is a social relationship based upon a common, extensive set of closely-shared identifications and expectations self-consciously held by the members" (p. 455). Restricted speech is said to lack explicitness in reference and description, with meanings likely to be concrete.

Bernstein feels that middle-class children tend to possess both a restricted and an elaborated code, where many lower-class children are said to be limited to the restricted code. Elaborated codes are said to be possessed by those who frequently symbolize their intentions in a verbally explicit form. Whereas the restricted code is bound closely to a particular situation, the elaborated code, with its more frequent adjectives, clauses and phrases, is more able to communicate independent of specific contexts. Experimental work has tended to substantiate Bernstein's contention about the class relatedness of the codes, and also about their linguistic characteristics (Bernstein, 1962; Loban, 1963; Krauss & Rotter, 1968). Typical of these studies was that of Heider (1968). He found that his lower-class subjects often employed metaphorical description when asked to communicate (It's like a boat") while the middle-class children employed a more analytic style involving more verbalization of detail ("It has a little opening at the top and there are sharp points on both sides"). Support for Bernstein's notion of language codes came from Cazden (1965) who reported that one of her lower-class subjects had more advanced grammatical development than did her middle-class subjects, yet he was poorer in terms of reference and explicit description. This highlighted the notion that the lower-class child may possess satisfactory linguistic competence when compared to the middle-class child but is likely to be deficient in aspects of language performance -- i.e., he is more likely to employ a restricted code.

According to Moore (1971), this functional aspect of language should serve as an important focus for preschool language programs for the disadvantaged. He noted that the following circumstances require the use of an elaborated code:

"(1) Speakers cannot rely on previously accumulated shared information.

(2) The speaker is required to take his listener into account by specifically naming referents which are not present or about which his listener lacks information.

(3) The bulk of the communication load falls on the language code itself, as opposed to such extra linguistic activities such as pointing, voice intonation, etc." (p. 21)

The implication from the above position for those involved with planning a language program for the disadvantaged would be to design learning tasks which would successively impose more and more of the above cognitive demands on a disadvantaged child, so that he might develop an improved language of reference which becomes less and less dependent upon visual "props" in the communication situation.

A further aspect of language function which Moore (1971) recommended be dealt with in a compensatory language program involves the evidence (see Hess and Shipman, 1965) which suggests that lower-class children exhibit a hestancy to question, to initiate verbal interaction with adults, and, in general, to gain information through verbal means.

Focus of the Present Study

The Language Experiences and Activities Project was designed to identify and provide a language-stimulating environment for children ranging in age from 18 to 40 months. The experiences and activities which constitute the experimental treatment have not been totally designed in advance, but instead arise and evolve weekly, in an attempt to match the abilities of the children. An underlying rationale, was, however, agreed upon in advance. That was to focus daily experiences and activities on the cognitive and the functional aspects of language as described above.

Strategies to facilitate language acquisition were derived from both transformational and S-R theories of language. That is, children were provided with a rich and varied sample of adult speech, with the adult verbalizing the child's actions to him, as well as expending and modeling the child's utterances -- these suggestions are derived from transformational theory (see Cazden, 1965). Also included in many daily exercises were suggestions from behaviorists for facilitating the acquisition of language concepts, as the reader will note below when the $S^D \longrightarrow R \longrightarrow S^{R+}$ paradigm is explained. Therefore, an eclectic approach to pedagogy was employed in this study, in an attempt to draw useful ideas from both theoretical positions.

As the reader will note from the following procedure section, exercises designed to stimulate functional language use were not employed with the two-year-old group, and were introduced only during the fourth month with the three-year-old group, since it was at this time the staff felt that the children were finally "ready" to work toward these difficult objectives.

Method

Subjects: Two-Year-Old Group

Thirteen children ranging in age from 17 to 26 months of age participated in this part of the study. Tables I and II contain further demographic data on these children, all of whom are enrolled in the educational day care program at the Center for Early Development and Education.

Three-Year-Old Group

Sixteen children ranging in age from two years, two months to three years, eleven months participated in this part of the study. Tables III and IV contain additional data on these children, who also attend the Center for Early Development and Education.

Experimental Design

A pretest-posttest control group design (Campbell and Stanley, 1963) was employed for both the two- and three-year-old groups:

$$R \; O_1 \; X_E \; O_2$$

$$R \; O_3 \; X_c \; O_4$$

R = random assignment to groups

O_1 and O_3 = pretesting (see Tables I-IV for data)

O_2 and O_4 = posttesting

X_E = the groups that received the experimental treatment

X_c = the control groups, which received a placebo treatment

The Experimental Treatments

The experimental treatment for the two-year olds consisted of daily (except Fridays) one-half hour sessions of language stimulation (to be described in detail below) conducted by the author and a research assistant. The adult-child ratio for the two-year-old experimental group was one to three.

The experimental treatment for the three-year olds also consisted of daily (except Fridays) one-half hour sessions of language stimulation (as described below). The adult-child ratio for the three-year-old experimental group was one to four. These children were taken out of their regular classroom for the language training, while control children remained in the regular classroom.

In an attempt to control for experimenter effects and the effects of extra attention, a placebo treatment was employed with control children of both age groups. On each morning during the experimental sessions, one of three research assistants assigned to this project on a rotating basis spent the one-half hour period with the control groups. When with the control children, the research assistant asked this teacher for direction as to how to interact, as well as for curriculum materials: the teacher might, for example, provide a book to read to the children. The principal investigator interacted with control children also; however, this typically occurred later in the day. In summary, it is possible to say that any experimental effect which may be obtained in this study is likely to be due to the curriculum employed during the experimental language training sessions, and not to teacher variables or the Hawthorne effect.

Evaluation

The two-year-old groups were pretested with the Bayley Scales of Infant Development (Bayley, 1969) and the Preschool Language Scale (Zimmerman, Steiner, and Evatt, 1969). This data is presented in Tables I and II. A Language Concept Test for two-year olds is being devised and will serve as an additional posttest for this group.

The three-year-old groups were pretested with the Illinois Test of Psycholinguistic Abilities (Kirk, McCarthy, and Kirk, 1968), the Stanford-Binet (Terman and Merrill, 1960), the Assessment of Children's Language Comprehension Scale (Foster, Giddan, and Stark, 1969), and the Expressive Vocabulary Inventory (Stern, 1968). This data is presented in Tables III and IV. An additional posttest for this group will be a story-retelling task adapted from Blank and Frank (1971). Stories retold by children of the experimental and control groups will be analyzed for mean length of utterance and mean number of different words per utterance, which will be combined to form a language complexity score. Data on this measure have been obtained from the previous year's three-year-old class at the Center for Early Development and Education. This class will therefore serve as an additional control group, since it was comparable and did not have a formal language development program.

CHARACTERISTICS OF TWO-YEAR-OLD EXPERIMENTAL GROUP

						Pre-tests		Post-tests		
Name	Sex	Race	Date of Birth	Age-Beginning of Study	Age-End of Study	Bayley	Preschool Language Scale	Bayley	Preschool Language Scale	Language Concept Test
G, S	F	B	9-24-69	2-01		85	101			
H, S	F	W	5-06-70	1-05		110	110			
C, T	F	B	7-27-69	2-02		92	110			
T, C	F	B	8-11-69	2-02		76	125			
R, T	M	B	8-03-69	2-02		100	120			
H, J	M	W	3-13-70	1-07		103	105			
						$\bar{X}=94.3$ $\sigma=11.4$	$\bar{X}=111.8$ $\sigma=8.3$			

TABLE II

CHARACTERISTICS OF TWO-YEAR-OLD CONTROL GROUP

						Pre-tests		Post-tests		
Name	Sex	Race	Date of Birth	Age-Beginning of Study	Age-End of Study	Bayley	Preschool Language Scale	Bayley	Preschool Language Scale	Language Concept Test
R, R	M	W	1-12-70	1-09		97	76			
P, B	M	B	3-10-70	1-07		81	100			
R, L	F	W	3-05-70	1-07		109	100			
P, J	F	W	7-29-69	2-02		88	62			
T, P	F	B	12-14-69	1-10		92	92			
E, T	F	B	2-26-70	1-07		103	---			
H, C	F	W	1-10-70	1-09		102	50			
						$\bar{X}=96.0$ $\sigma=8.9$	$\bar{X}=80.0$ $\sigma=19.1$			

CHARACTERISTICS OF THREE-YEAR-OLD EXPERIMENTAL GROUP

						Pre-tests				Post-tests					
Name	Sex	Race	Date of Birth	Age-Beginning of Study	Age-End of Study	ITPA	Binet	ACLC	EVI	ITPA	Binet	ACLC	EVI	Language Function Test	Story Retelling
A, J	M	W	7-08-68	3-04		32.2	97	62	12						
H, R	M	B	6-18-68	3-03		28.1	84	20	5						
M, H	M	B	7-20-69	2-02		31.5	98	9	0						
W, B	F	B	3-12-69	2-06		38.7	103	50	15						
T, P	F	B	8-17-68	3-01		31.4	94	53	7						
J, C	F	B	3-20-69	2-06		38.5	112	39	15						
H, K	F	W	8-26-68	3-01		35.2	94	51	14						
C, M	F	B	10-31-67	3-11		39.4	102	76	19						
						X=34.4 SD=3.9	X=98.0 = 7.6	X=45.0 =20.4	X=12.4 =4.5						

TABLE IV

CHARACTERISTICS OF THREE-YEAR-OLD CONTROL GROUP

						Pre-tests				Post-tests					
Name	Sex	Race	Date of Birth	Age-Beginning of Study	Age-End of Study	ITPA	Binet	ACLC	EVI	ITPA	Binet	ACLC	EVI	Language Function Test	Story Retelling
C, B	M	B	8-09-68	3-02		37.9	107	59	18						
E, T	M	B	5-12-68	3-05		31.9	87	26	10						
J, D	M	B	9-20-68	3-00		35.9	96	30	11						
J, J	M	B	7-04-68	3-03		---	79	48	0						
P, J	M	W	8-22-68	3-01		39.8	109	--	18						
W, C	F	B	9-24-68	3-00		31.3	100	34	0						
F, L	F	B	9-19-68	3-00		31.9	91	41	12						
T, T	F	W	11-19-67	3-10		47.3	122	82	25						
						X=36.6 SD=5.3	X=98.9 =12.8	X=45.7 =18.1	X=15.7 =5.2						

Procedure (Two-Year-Old Experimental Group)

During the first month, language comprehension was stressed. When three snack items were placed before them and they were asked, "Take your milk," "Take your napkin," etc. their task was to learn to select the proper item. They learned what to do when asked to "Throw away your garbage" by being led to the can and helped to throw away their trash, while all the time the adult was labeling the event verbally and praising the child's performance.

A general procedure was next followed which involved the adult's labeling the actions the children liked to perform. If a child was dialing the phone, the adult would say "Oh! You can dial the phone"; if another was throwing a ball the adult said "Throw the ball to me!" Over a period of several weeks the children came to comprehend these sentences and others like them -- such as "Turn the pages," "Kick the ball," "Sweep with the broom," "Pat the dolly," "Write on the board," "Put the blocks in the can" etc. That is, if the sentence alone was said to a child and the object referred to was in the room, the child would (usually)go and perform the action.

During the second month, children were shown specially prepared 8 1/2 X 11" cards with two pictures on them. Pictures were cut from magazines and were of common items: a dog, a car, a baby, a house, a bird, etc. The adult would wander from child to child, staying with each as long as interest was maintained, usually about five minutes. A child was shown, for example, the card with the dog and the baby on it and asked "Point to the doggie." Over a two-week period the children satisfactorily learned to do this with 15 different cards.

At this time, children also learned to verbally imitate the sounds of several different animals.

During the third month, employing the same general procedure of approaching a child during free play and prompting and modeling the appropriate performance for him, the children all (at different rates, of course) learned to do these actions when asked: Blink your eyes, roll over, put your hands in the air, touch your nose (and other body parts), crawl on the floor, clap hands, lie down. They learned to point to various parts of their room when asked: the table, the door, the window, the light, etc.

During this third month work on language production was begun. A good part of this involved encouraging the children to imitate common nouns. The experimenter sat at the children's table with a bag full of various kinds of rfuit, and the children squeled when he produced a piece from the bag. Then the children were told "This is an apple" and took turns trying to say "apple" and touching it. This was a procedure which the children enjoyed, as evidenced by the fact that they voluntarily remained seated in a group for 15 minutes.

At the beginning of the fourth month of work with the children, operant conditioning techniques were employed for the purpose of increasing the number and quality of the children's utterances. This was the general paradigm:

$$S^{D} \longrightarrow R \longrightarrow S^{R+}$$

Light Switch: Child sees light switch and waits to be picked up to play with it. Adult asks child to say "Pick me up," or simply "Up" for the less advanced children.	Child says "Up"	Adult lifts child to play with light switch
Blocks: Child sees adult has made pile of blocks. Child approaches to knock pile down. Adult says "Say *knock em down!*"	Child says "Knock em down!"	Adult lets child tumble blocks
Car: Child sits in car waiting to be pushed. Adult says "Say *push me please*"	Child says "Push me please."	Adult pushes child
Airplanes Mobile: Child looks up at planes. Adult says "Say *see airplanes*"	Child says "See Airplanes"	Adult lifts child up and lets him touch the airplanes.

This technique makes use of the Premack principle (see Premack, 1965) in that one behavior (playing with light switches, cars, blocks, etc.) is used to reinforce another behavior (vocalization). Coupled with the principle of *shaping* (see Skinner, 1953), which provides the means to individualize instruction, the two principles provided a broadly generalizable pedagogical technique which was incorporated into the language program from this point onward. It was not instigated until the experimenters had become well known to the children; it appears that good rapport is crucual to the success of this technique with two-year olds.

During the fourth month of the study (February, 1972) the additional stimulation technique of sociodramatic play is being employed. The children were at first apprehensive on the morning the principal investigator appeared in a home-made monster mask, but soon each child asked for a turn to wear it, and all learned to say the three word combination "go ' way, monster!"

Procedure (Three-Year-Old Experimental Group)

The first two months with the three-year olds were spent working exclusively on aspects of language comprehension. During this period, no child was placed in a situation in which he was expected to talk. Instead, sessions were devoted to expanding the children's understanding of language. Activities were varied so that children were not expected to always remain seated. For example, seated exercises typically involved responding to earn an item of food on the daily snack menu. Fifteen common items from the children's room were obtained, and first two, then three and more items were placed in front of each child. If the item were a comb, a block, and a doll, the experimenter might say "Give me the block." Incorrect responses were followed by practice naming each item and an immediate repeat of the question. This procedure was also used several times with pictures of objects, including items from the "Assessment of Children's Language Comprehension" Test -- some teaching of this test was employed. An example of a less restrictive activity employed during this time involved giving each child a doll and getting the child to make the doll follow a list of verbal instructions: "Make the doll: stand up, run, sit on the floor," etc. During the third month we continued with work primarily centered on language comprehension exercises, which were by this time increased in difficulty from recognition type items, "Show me the ball" to more difficult items requiring the comprehension of description, "Show me the one that can bounce." Exercises were also increased in difficulty by adding more elements to the request. "Give me the rubberband and the block" was asked when the child had an assortment of objects from which to choose. At this point, the concept of 'OR' was taught by saying "GIVE me one thing, the pencil or the doll."

Stories were told to the children at least once a week. The author devised ten short stories which could be concretely represented in front of the children, and these were employed."This is Susie" is one such story, five lines in length: "This is Susie. She can stand up, and she can sit down. She can walk slowly, and she can run quickly. Susie can wave "Hello." Sometimes Susie stands on her head, like this." Children were given the doll, Susie, after hearing the story several times, and then helped to perform and narrate the story on their own. This general procedure was followed with all stories.

The fourth month's exercises included many involving more complex communication situations. The three-year olds were gradually given practice in describing objects to others in the absence of the actual objects. For example, if a child were shown a piece of paper and could successfully name it, it was removed and the child was then asked to tell how paper can be used, or what he likes to do with paper.

Another situation which proved to work well and which imposed some of the cognitive demands previously discussed involved taking one child away from the group into another room, where the experimenter performed some action which the child was to go report to the others. For the less advanced children, the adult verbally labeled his own actions: "See Johnny, I'm cutting this paper in half." Johnny would run back and report, "He be cuttin' that paper." For other children, the experimenter would merely say "Watch me and go tell them what I do." Some of the actions were: Stand on chair, drink a coke, jump up and down, draw a picture, put a flower in hair, read a book. This task was varied in several ways in succeeding weeks to maintain interest in the activity -- the experimenter in one instance wore a mask, and on several other days the experimenter employed puppets to perform the actions. Other exercises of this nature were devised. One activity centered around the construction of a doll house. Shown a pile of disassembled pieces, children were asked "Waht is it? "What shall we do with it?" "How can we put it together?" Later, while leaving the room and with the doll house put away, each child was asked "Waht did we do in here today?" All except the youngest boy were able to say at least "We made a doll house." Some could answer "How" with "We used some tape."

Presently, during the fifth month, the above types of procedures are being continued. Additionally, another exercise has been initiated for the purpose of providing practice in initiating verbal interaction with adults. Instead of the procedure followed to this point during language lab, in which children were typically expected to answer a question to earn a part of their morning snack, they were now expected to ask a question to get their snacks. A separate snack table was set up in the corner of the room, and a research assistant reminded the children that it was snack time. She said to go over and say, "May I have my napkin please?" The experimenter, while sitting behind the snack table, would speak (and produce the snack item) only when spoken to. After one week with this procedure, the children enjoy it and it has become routine. Ways are now being devised to increase the cognitive demands inherent in this situation.

Future Plans

Future plans include, of course, the post-testing and analysis of results of this project. Additionally, many visitors to the center have expressed an interest in the language-building experiences and activities which comprise the experimental treatment of this study. These daily exercises will therefore be assembled into a booklet for distribution and possible publication.

It is also the author's intent to expand the Language Experiences and Activities Project to include four- and five-year-old children during the next school year.

References

Blank, M. and Frank, S. M. Story Recall in kindergarten children: effect of method of presentation on psycholinguistic performance. Child Development, 1971, 42, 299-312.

Blank, M. and Solomon, F. A tutorial language program to develop abstract thinking in socially disadvantaged preschool children. Child Development, 1968, 39, 379-839.

Bayley, N. The Bayley Scales of Infant Development. New York: Psychological Corporation, 1969.

Bernstein, B. Social class, linguistic codes and grammatical elements. Language and Speech, 1962, 5, 221-240.

Baratz, J. C. A bi-dialectal test for determining language proficiency. Unpublished paper. 1968.

Baratz, S., and Baratz, Joan C. Early childhood intervention: The social science base of institutional racism. Harvard Educational Review, 1970, 40, 29-50.

Brottman, M. A., ed. 1968. Language remediation for the disadvantaged preschool child. 1 Monographs of the Society for Research in Child Development. 33 (8).

Brown, R., Cazden, Courtney, and Bellugi, Ursula. The child's grammar from I to III. In J. P. Hill (Ed.), The 1967 Minnesota symposium on child psychology. Minneapolis: Univ. Press, 1968. Pp. 28-73.

Bernstein, B. A socio-linguistic approach to social learning. In J. Gould, (Ed.), Penguin survey of the social sciences. Baltimore, Maryland: Penguin, 1965, 144-168.

Bereiter, C. and Engelmann, S. Teaching Disadvantaged children in the Preschool. New Jersey: Prentice-Hall, 1966.

Campbell, D. and Stanley, J. Experimental and quasi-experimental design for research. Chicago: Rand McNally, 1963.

Cazden, C. The acquisition of noun and verb inflections. Unpublished manuscript, 1967.

Chomsky, N. Syntactic structures. The Hague, Netherlands: Mouton and Company, 1957.

Cazden, Courtney B. Environmental assistance to the child's acquisition of grammar. Unpublished doctoral dissertation, Harvard University, 1965.

Cohen, P. Some methods in sociolinguistic research. Paper presented at the Research Planning Conference on Language Development in Disadvantaged Children, Yeshiva University, 1966.

Chomsky, N. Aspects of the theory of syntax. Cambridge, Mass.: M. I. T. Press, 1965.

Deutsch, M. The role of social class in language development and cognition. American Journal of Orthopsychiatry, 1965, 35, 77-88.

Ervin, Susan M. Imitation and structural change in children's language. In E. Lenneberg, (ed.), New directions in the study of language. Cambridge, Mass.: MIT Press, pp. 163-89, 1964.

Engelmann, S., Osborn, J. & Engelmann, T. The DISTAR language program. Chicago: Science Research Associates, 1969.

Furth, Hans G. Piaget and Knowledge: Theoretical Foundations. Englewood Cliffs, N. J.: Prentice-Hall, 1969.

Foster, C.R., Giddan, J.J. and Stark, J. Assessment of Children's Language Comprehension. California: Consulting Psychologists Press, Inc., 1969.

Fraser, C., Bellugi, U., & Brown, R. Control of grammar in imitation, comprehension, and production. Journal of Verbal Learning and Verbal Behavior, 1963, 2, 121-135.

Horner, V. M. Misconceptions Concerning Language in the Disadvantaged. In J. C. Frost (Ed.), Early Childhood Education Rediscovered. New York: Holt, Rinehart and Winston, Inc., 1968, 405-408.

Hatwell, Y. Role des Elements Figuratifs dans la Genese des Operations Spatiales in L'Epistemologie de l'Espace, Vol. XVIII, Chap. VII. Paris: Presses Universitaires de France. 1964.

Hess, R. D., and Shipman, Virginia C. Early Experience and the socialization of cognitive modes in children. Child Development, 1965, 36 869-886.

Heider, E. Style and effectiveness of children's verbal communications within and between social classes. Doctoral dissertation, Harvard University, 1968.

Jeruchimowicz, R., Costello, J. and Bagur, S. J. Knowledge of action and object words: A comparison of lower-and middle-class Negro preschoolers. Child Development, 1971, 42, 455-464.

John, V. P. The intellectual development of slum children: some preliminary findings. American Journal of Orthopsychiatry, 1963, 33, 813-822.

John, V. Communicative competence of low-income children: Assumptions and programs. Report to the Ford Foundation, 1967.

Krauss, R., and Rotter, G. Communication abilities of children as a function of age and status. Merrill-Palmer Quarterly 1968, 14, 161-173.

Kirk, S. A., McCarthy, J. J. and Kirk, W. D. The Illinois Test of Psycholinguistic Abilities. (Revised edition) Illinois: University of Illinois Press, 1968.

Labov, W. The Study of Nonstandard English. Illinois: National Council of Teachers of English, 1970.

La Civita, A., Kean, J. M. and Yamamoto, K. Socio-economic status of children and the acquisition of grammar. Journal of Educational Research, 1966, 60, 71-74.

Lin, S. Pattern practice in the teaching of standard English to students with a non-standard dialect. New York: Teachers College, Bureau of Publications, 1965.

Loban, W. The language of elementary school children. Champaign, Illinois: National Council of Teachers of English, 1963.

McNeill, D., The Acquisition of Language. University of Chicago, 1970.

Menyuk, P. The Acquisition and Development of Language. New Jersey: Prentice-Hall, Inc., 1971.

Menyuk, Paula. A descriptive study of the syntactic structures in the language of children: Nursery school and first grade. Unpublished doctoral dissertation. Boston University, 1961.

Menyuk, Paula. Sentences children use. Cambridge, Massachusetts: M.I.T. Press, 1969.

Menyuk, Paula. Syntactic structures in the language of children. Child Development, 1963, 34, 407-422.

Moore, D. R. Language research and preschool language training. In C.S. Lavatelli (Ed.), Language Training in Early Childhood Education. Illinois: University of Illinois Press, 1971, 3-48.

Osser, H. The syntactic structures of five-year-old culturally deprived children. Paper read at the meeting of the Eastern Psychological Association, New York City, April 1966.

Plumer, D. A summary of environmentalist views and some educational implications. In F. Williams (Ed.), Language and Poverty. Chicago: Markham Publishing Company, 1970, 265-308.

Premack, D. Reinforcement theory. In D. Levine (Ed.) Nebraska Symposium on Motivation: 1965. Lincoln: University of Nebraska Press, 1965, 123-180.

Shriner, T. H., and Miner, L. Morphological structures in the language of disadvantaged and advantaged children. *Journal of Speech and Hearing Research*, 1968, *II*, 605-610.

Shulman, L. S. Reconstruction of educational research. *Review of Educational* Research, 1970, *41*, 371-396.

Shuy, R. W. The Sociolinguists and Urban Language Problems. In F. Williams (Ed.), *Language and Poverty*. Chicago: Markham Publishing Company, 1970, 335-350.

Sinclair-De-Zwart, Hermina. Developmental psycholinguistics. In D. Elkind & J. Flavell (Eds.), Studies in cognitive development: *Essays in honor of Jean Piaget*. New York: Oxford University Press, 1969.

Skinner, B. F. *Science and Human Behavior*. New York: Macmillan, 1953.

Stern, C. *The Expressive Vocabulary Inventory*. UCLA Research Projects in Early Childhood Learning, 1968.

Stewart, W. A. Urban Negro Speech: Sociolinguistic factors affecting English teaching. In R. W. Shug (Ed.), *Social Dialects and Language Learning*. Champaign, Illinois: National Council of Teachers of English, 1965.

Templin, M. Certain language skills in children: Their development and inter-relationships. Minneapolis, Minn.: University of Minnesota Press, 1957.

Terman, L. M. and Merrill, M. A. *The Stanford-Binet Intelligence Scale*. Boston: Houghton-Mifflin, 1960.

Voyat, Gilbert, and Silk, S.,"Cross-cultural Study of Cognitive Development on the Pine Ridge Indian Reservation." *Pine Ridge Research Bulletin*, Vol. 11, 1970. Department of Health, Education, and Welfare. Pp. 52-73.

Voyat, G. Relationships between language and thought. *Childhood Education*, February 1972, 248-251.

Williams, F. *Language and Poverty.* Chicago: Markham Publishing Company, 1970.

Zimmerman, I. L., Steiner, V. G. and Evatt, R. L. *The Preschool Language Scale*, Ohio: Charles E. Merrill Co., 1969.

Chapter III TRAINING

The Center training program covers the traditional categories of pre-service and in-service and is designed to be comprehensive enough to cover all staff members of the Center.

Pre-Service Training

This is a fairly brief (either one or two weeks), concentrated period of training offered in late summer for all persons on the staff. It is scheduled for the only time each year when child care is not provided (although there are usually one or two children of staff members sitting in on the sessions), and the topics introduced are those that are appropriate at each time period. That is, the pre-service sessions held in 1971 were quite different from those offered in 1969, as a large proportion of the current staff has been with the project since the beginning and no longer needed a review of the philosophy and objectives of the project. However, there are always some new staff members joining at that time, so some of the sessions will review basic facts about the project and will be attended only by incoming staff while others will deal with current topics and will be offered to the entire group. For example, last summer it appeared that not all the staff fully grasped the ethics of intervention research, and one full day of the training period was devoted to this topic.

The format for this training involves staff participation as much as possible. Although initially we brought in some outside speakers to cover special topics for these sessions, we are now more prone to have someone on the staff lead a discussion on an assigned topic. Toward the end of this period the teachers spend part of the time getting their classrooms ready for the children.

In-Service Training

The major thrust of our training involves continuous staff training at all levels throughout the year. As described in the paper in Appendix A, it is not always easy to find a time when all staff members can get together. However, with skillful deployment of available staff, we have succeeded in making arrangements to have almost everybody together once a week and to have relevant subgroups together at other times.

We have at least four regular training seminars that are on-going throughout the year:

1) Research Staff Seminar. This is a weekly meeting for all research personnel, and has already been discussed in Chapter II.

2) Workshop in Early Childhood Education. This is a weekly training seminar offered by the project director and attended by all the preparatory teachers and practice teaching students. In this seminar we cover relevant topics on an ad libitum basis. For example, during the spring of 1972 our outline includes: a review of basic Piaget; comparative aspects of play; ecology of early childhood settings; current evidence on the continuing controversy betweeen structured and unstructured programs.

3) Aide Seminar.[1] The aides'training program is an essential component of the Center activities. Adults who have the regular responsibility of teaching and caring for the needs of young children should have a continuing inservice training program which allows them to discuss problems and learn new techniques with the assistance of professional personnel.

The aides'training is planned to give a brief condensed overview of the objectives of the project followed by basic concepts of child development. The positive approach to child care is foremost in our training sessions. These training sessions are designed to give the aides a feeling of worth and dignity in their roles as teaching assistants.

Some of the weekly training sessions are planned to:

Develop a psychological attitude which allows children to develop to their maximum potential without pressures or resentment;

Establish a sense of responsibility for the learning environment;

Demonstrate the use of new and unfamiliar teaching materials;

Review and discuss current issues in child development and education;

Give aides exposure to experts in the field of child development and education through lectures, movies, literature, demonstrations, and observations.

Each aide has done a special research project on the age group that she is assigned to work with. The results of each study have been discussed in our weekly meetings.

Ways of dealing with common problems of children are shared, and group knowledge is brought to bear on persistent problems that occur in all groups.

4) Faculty Forum. This is our weekly period when all of the elementary and preparatory teaching staff and most of the other staff members get together. Some of the sessions in this Forum are devoted to trouble-shooting. For example, at the beginning of this semester when the new practice teaching program was introduced, it was not met with immediate acceptance. Quite the reverse; several teachers did not like it at all. Accordingly the next session of the Forum was turned over to a discussion of how we could modify it in order to meet the objections of the elementary teachers who resisted some components of the plan. The Forum has been every effective in working through situational problems that come up from time to time.

By far most of the sessions of the Forum are devoted to a joint exploration of topics of interest to the staff. Topics are chosen by a committee that rotates each year. We have been amazingly successful in bringing in for these sessions (usually with no honoraria) many of the community's outstanding leaders. For example, in recent sessions we have hosted the director of the Arkansas Art Center, the head of the local Office of Economic Opportunity, a dynamic social worker from Yale University, who demonstrated techniques of holding class discussions with children, the state director of Title I programs, etc. In forthcoming sessions we will be hosting one of the lawyers from the firm that is generally the plaintiff in all desegregation suits against the local school board and, in an "equal time" arrangement, the lawyer (recently elevated to national prominence as a Supreme Court nominee) who has represented the board. Because such speakers have much to offer the community, and because there is no comparable training program to this in any other Little Rock school, we have opened these sessions to persons from the entire community and always have from one to a dozen non-staff persons in attendance.

---

[1] This section was written by Mrs. Faustenia Bomar.

Student Training

Every semester there are approximately ten students enrolled in the University of Arkansas who do their practice teaching with us. Beginning in January 1972 we introduced a new format for this vital learning experience. Most of us on the staff are quite excited about this, as we feel it offers a truly unique training experience to the young men and women who will staff our schools of the future. The plan was not instituted without opposition, as there were objections to parts of it from both our parent department (Elementary Education) in the University and from supervisory personnel in the Little Rock School District. It was thoroughly discussed at the November 1971 meeting of the Center's Institutional Advisory Council and approved for a trial run during the spring semester. Thus at this point in time we are just about half way through the first trial of the plan. Our plan is to evaluate it at the end of the semester (in terms of university student reaction, Kramer teacher reaction, and Kramer pupil reaction) and revise it as necessary for next fall. A quick summary of the early reactions is that the students love it -- in fact, we have not during our existence seen students so excited about anything -- but some of the lead teachers (really only one) object strenuously to it. We would appreciate reactions from any of the review panel members who have had experience in this type of training to the major ideas of our plan.

Mr.Stephen Lehane of our staff was primarily responsible for the design of the program and was the author of the description which follows.

Student Teacher Training Program

The young men and women who choose to participate in the Center's Apprenticeship in Teaching Pedagogy will for the most part bring with them an unchanneled reservoir of idealism, hope and commitment. We who have assumed the responsibility of channeling the reservoir must extend our energies and talents in order to chart the best possible course for these apprentice teachers. The following represents such a chart that should provide apprentice, master (i.e. cooperating teacher) and supervising faculty a rich and rewarding course of action.

Basically the apprentice will be guided through two channels, one dredged deep in theory and the other in practice. The former, a seminar, will consist of an integrated course in Developmental Teaching Pedagogy, for both the master and apprentice.

The course will encompass the three integrated spheres of the child, the school, and the teacher with an intent of revealing how each is undergoing a dynamic evolvement, though at such different intensities, that gaps result which tend to undermine the harmonious integration of these spheres. Of the gaps the most obvious ones are the generational distance between child and teacher and the ideological chasm separating those who champion the old and new pedagogy; although less obvious but perhaps more threatening is the gap or lag resulting from the disparity between the traditional conceptualization of the teacher's role and the burgeoning new role being assumed by the school in its attempts to meet the complex needs of a highly technological and continuously evolving society.

With the seminar representing such a collage of participants (apprentice, master, and professional educators) it is anticipated that these gaps will be at least analyzed and perhaps even bridged. If possible it might be desirable for credit and/or an honorarium to be negotiated for the master for his or her participation in the Seminar.

It seems fitting that the apprentice's training should reflect the Center's most unique feature -- its developmental population, an aggregate of children who range in age from infancy to adolescence, the span which has been traditionally employed to demarcate the "whole of childhood." Historically the spirit that has germinated the enlightened concept that the whole child is necessary for teacher preparation preparation can be traced from Comenius to Dewey. However, it is rare for students to have the opportunity for exposure to a wide age spread of children during their training.

Extensive exposure to the "whole child" is indispensable, as teaching is an art form fashioned through extensive contact with its medium, the child. "While substantive and methodological courses,"as William James asserted, "provide the scientific ground rules which determine the admissable and acceptable norms that this art can assume, these rules would invariably govern a silent vaccum if the art has not been cultivated." It is unfortunate that most new teachers are products of institutions which either by necessity or by choice segregated them from children while immersing them in ground rules. Similarly, most practicing teachers gradually specialize in an age group thereby becoming increasingly entrapped in a situation which prevents the maturing of a genuine developmental orientation.

The child-centered position as enunciated above is not unprecedented; however, what is unique is our desire to feature it at the center of our teacher education program. Its centrality is predicated upon the proposition that systematic and extensive exposure to the whole child provides the necessary foundation for developing a teacher who can creatively manage both the social order and scholastic learning. Despite the fact that the whole-child experience must be squeezed into the prevailing certification requirements, its integrity can be maintained by adhering to the plan which follows:

The plan fundamentally entails allocating the apprentices time to the following age quadrants: Quad I, 6 months - 2 years; Quad II, 3-5 years; Quad III, 6-8 years; Quad IV, 9-12 years. Some time during the semester will be spent in each Quad. The amount of time that each apprentic allocates to these different Quads will depend upon his Major and his Minor levels of concentration.

The Major represents the age level or Quad that the apprentice wishes to specialize in; thus he will allocate approximately 2/3 of his classroom time to the Quad of his specialization. The Minor represents an age level or Quad of Secondary interest; thus the apprentice will consign approximately 1/5 of his classroom time to his Quad of Secondary interest.

The Major, which exposes the apprentice and master to each other's pedagogical styles, is intended to result in a synthesis or bridging of styles. The Minor will allow the apprentice the opportunity to design and execute methods and materials that are relevant to the teacher's changing role as augured by our highly technol-electronic changing society. For instance an apprentice can fashion a humanistic model of teaching that could mirror Dr. Phyllis Elardo's AWARE program.

Though the Minor relegates the apprentice to a Quad other than that of his specialization, it is to be hoped that any general concepts he develops in one Quad can be extrapolated to another. The Minor, by virtue of its experimental nature, will thrust the apprentice into a collegality with the research members of the Center, as well as with other teachers and students.

The Narrative Case Study

In addition to the continuity made possible by exposure to children of different ages, each student will have an opportunity to do an extensive case study of an individual child. This will involve a semester long exposure for the apprentice of both the school and home life of the child. During this time the apprentice will be composing a diary describing his relationship with the child. To enhance the apprentice's sensitivity of the child's perceptions an ecological frame of reference will be applied to the diary. The bases for this ecological analysis will be drawn from Lewn's (1951) psychological ecology advanced by Ortega Gasset (Commanger, 1950). The application of the latter two conceptual tools should add a unique dimension to this case study.

As the reader wades through the text it will be obvious that this is a highly compacted and compressed program that ideally should be protracted over two semesters. However in light of the present arrangement between the University and the Center this protraction cannot be immediately realized; thus the program will be portrayed as a one semester experience.

The Quads and Levels of Concentration will be orchestrated in the following fashion:

Phase 1: Weeks 1-4. Practice: This initial experience will consist of rotating all the apprentices through the 4 Quads, one Quad per week. The mornings of this phase will be utilized by the apprentice to observe and also to carry out under supervision plans designed in advance by the master. These plans will ensure that the apprentice has the opportunity to participate and not merely observe in the various Quads. As this phase is consumated the apprentice should have declared his Minor and Master.

Theory: Week 1 - Three one hour afternoon sessions will be consumed by a Seminar that will consist of presenting the philosophy of the Project by members of the Center, School District, University and community. Some of this orientation can be programmed via tapes and slides, or videotapes.

Week 2-4, will entail the introduction to the Developmental Teaching Pedagogy. It will be employed as a frame of reference to analyze the classroom practices of the apprentice and master teachers while also providing an opportunity to discuss social, moral, and developmental issues related to Pedagogy. (The Seminar will meet for 3, one hour sessions per week at approximately 2:30 - 3:30. One of these hours will be consumed by participating in the Faculty Forum. The latter is an inservice component which consists of weekly presentations by eminent speakers whose topics are intended to probe issues vital to the child, teacher, and the school.

Phase 2: Weeks 5-8. Practice: Half the apprentices time will be devoted to his Major and the other half to his Minor. All the apprentices who Major in one Quad will represent a pool. Teachers who have children reflecting each of the Quads may draw upon these pools; no apprentice is to consign more than 3/4 of this phase to any one master teacher in his Quad. This will assure the apprentice a variety of exposure to teachers within his Major. Schedules will be organized to allow apprentices to spend their mornings in the Quads I and II or the preschool.

Week 5. Each day the apprentice will jointly design with the master master, but soley execute the daily activities for one group composed of 3 to 4 children. One videotape of each apprentice will be made for critiquing in the Seminar. For his internment in the minor the apprentice will adhere to plans solely developed by the teacher.

Week 6. Jointly design and solely execute for two groups. Another videotape will be made.

Week 7-8. Jointly design and solely execute for 3 groups not to exceed more than half of the classroom's children.

Theory: The theme of the Seminar for this phase will be on learning as it is introduced by teachers, processed by children, and used by the school and society.

Micro Teaching as pioneered by Allen (1963) will be used to analyze the teacher's instructional role.* (One session per week can be devoted to critiquing.)**

Cognitive Development of the child as expressed by Piaget, Vygotsky, Bruner, Kendler, et al (1970) will be employed to describe the child's developmental learning processes.

Sociological Analysis inspired by Durkheim and Parsons (Dreeben, 1968) will explore the way the school fits into the larger society and plays an economic as well as an academic role.

---

* (Video tape analysis and feedback for apprentice and master teachers will be the format used throughout all the phases for the teacher sphere.)

**. The critique's could be done by the master or the principal. This would save survival time, but we'd have to find others.

Phase 3: Weeks 9-12. Practice: Two thirds of the apprentices time will now be allocated to his Major and 1/3 to his Minor. The scheduling of Major and Minor times will be individually negotiated in such a way that one apprentice may have a complete day for the minor.

Weeks 9-10. Jointly design and solely execute two complete classroom days envolving the entire class.

Weeks 11-12. Solely design and execute the above.

Theory: The Seminar's theme for this phase will consist of analyzing the Social concepts under which teachers, children and schools function.

Molar Teaching as researched by Flanders and Bellack (Simon and Boyer, 1967) will be used to analyze the teachers social role as will become evident as one reads. Through this program the study of teaching will begin with an analysis of very small or micro behaviors, then progress to molar or larger purposive social behavior and finally culminate in an analysis of the macro elements (space, time, materials, etc.) that influence teaching.

Social Development as conceptualized by Erickson, Bettelheim, et al (Ausubel and Sullivan, 1970) will be used to characterize the social role of schooled children.

An instrumentalist philosophical position will be used to analyze the social order that schools impose on children.

Phase 4: Weeks 13-15. Practice: The major will consume the apprentice's total time, with the exception of his hourly case study.

Week 13-15. The apprentice and master will jointly plan and execute the week for the entire class. However, the master teacher's role during execution will be ancillary and subordinate to the apprentice who will assume the teaching leadership.

Theory: This phase will involve seminars concerning the extenuating environmental influences upon teachers, children, and schools.

Macro Teaching will analyze the ecological classroom factors reported by Gump and Barker (1963) and Caldwell (1971) that influence a teacher's functioning.

Emotional Development is important dimension of the child which is usually beyond the direct influence of the school will be analyzed. The prevailing humanistic morality of our culture will be used to analyze the morality promoted by schooling.

Phase 5: Week 16. Practice: Mornings assigned to Field Trips encompassing alternative modes to contemporary schooling.

Theory: Afternoons will concentrate on the teacher's professional role as it relates to Educational change and innovation. Each apprentice will discuss his case study in diary form.

Supervision and Evaluation

All supervisors will be drawn from the Center's professional staff, and all will participate in the Seminar. Final evaluations for both the theory and practice sessions will reflect a composite drawn from the different participating supervisors.

References

Allen, D. Demonstration of the use of video tape recorder in teacher training. Stanford, California: Stanford University Press, 1963.

Ausubel, D., and Sullivan, E. Theories and problems of child development. New York: Grune and Stratton, Inc., 1970.

Barker, R. The stream of behavior. New York: Appleton-Century-Croft, 1963.

Caldwell, B. M. A new approach in behavioral ecology. In J. Hill (Ed.), Minnesota Symposia on Child Psychology, Vol 2. Minneapolis, Minn.: University of Minnesota Press, 1969. 74-109.

Commager, H. S. The American Mind. New Haven, Conn.: Yale University Press, 1950.

Dreeben, R. On what is learned in school. Addison-Wesley Publishing Co., 1968.

Lewin, K. Field theory in social science. New York: Harper & Row, 1951.

Simon, A., and Boyer, E. Mirrors for behavior. Philadelphia, Penn.: Research for Better Schools, Inc., 1967.

Chapter IV OUTREACH ACTIVITIES

The Kramer project has had the good fortune of not having to exert itself for outreach activities; rather the world has come to us. We have been continuously humble at the steady stream of visitors who come to find out what we are doing, how we are doing it, and then go back to their communities to try to develop similar programs. Such visits make us all the more aware of the areas in which we have not lived up to our own collective expectations and increase our resolve to work through these problems.

The major piece of publicity the project has had came through an article written by Mr. Ted Irwin for Parade, the magazine supplement included with many of the Sunday papers distributed throughout the country. A copy of this article is enclosed as Appendix L. The response to this article has been overwhelming, even though we were aware of the wide distribution of the magazine. To us it demonstrates convincingly the interest in this type of project and the responsive chord struck by our public school-university model.

In addition to this national publicity, we have received a great deal of local attention. One of the Little Rock newspapers featured an article on Dr. Elardo's Project AWARE for Valentine's Day. Even though this could have overly sentimentalized the project, we felt that it was very sensitively written and gave a good distant look at the aims of the project. A copy of this article is enclosed as Appendix M.

Recently the project director delivered one of the four lectures on day care sponsored by Pacific Oaks College in Pasadena, California. The text of the lecture is enclosed as Appendix G. While in the Los Angeles area, the project director was interviewed for several radio programs and also interviewed by a reporter for the Los Angeles Times, Mrs. Ursula Vils. The article appeared in the Times several days after the Pacific Oaks lecture, but we felt that it contained some important ideas for the lay public to have about day care. A copy of the article is enclosed as Appendix N.

The SACUS workshop on Infant Day Care has already been described, so no further space will be given to it. Here it is significant to note that most of the 200 participants visited Kramer during the workshop. Our philosophy and our ideas are heavily represented in the publication, and we consider it another important activity.

Although we have no publication to show for it, an important international type of outreach occurred last May when the project director was one of the four faculty members for the Inter-American Symposium on Early Stimulation, sponsored by the Panamanian Institute for Special Education. This provided a unique opportunity to introduce the Kramer ideas to representatives of pediatrics, psychology, education, physiotherapy, social work, and occupational therapy from all over Latin America. For the project director, this seminar was one of the highlights of the year.

Our greatest concern in outreach activities for the future is to increase our local impact. It may seem ironic, but we are probably better known in Panama and California than we are in Little Rock. Our Faculty Forums have become of such high quality this year that we feel selfish in keeping the meetings to ourselves. Therefore, we have decided to open them to the local educational community and now routinely invite all elementary principals and teachers who can attend. A number of private citizens particularly interested in early child development have been attending regularly. During our next year, our major thrust of outreach activities will be oriented locally.

Several people have asked us a question that is always upsetting to a scientist or a professional: "Who handles your public relations?" Nobody handles our public relations, and we are not sure we could absorb all the attention if anyone did! We are convinced that the attention the project has received is simply related that ours is an idea whose time has come. And when that happens, people discover you.

Chapter V Future Plans

How will Kramer develop in the future? At this time we are half way through our third year (really only our second year in the elementary division), and we have only two years remaining under the original five-year plan. We now have our research program so well-organized that we confidently expect to have major contributions to make in terms of increasing our understanding of child development. This excellent organization of the research gives us some time and energy to apply to our greatest challenge--making our school into the "school of the dream."

Education Division Plans

Throughout this year the staff has been undergoing a fairly intense (and not always comfortable) internal evaluation. At a number of sessions of the Faculty Forum we have made suggestions, considered alternatives, aired grievances, and in general applied our collective talents and energies to the task of improving the school. Yet, in truth--and why even in a progress report should one tell other than the truth--we are not certain that we have succeeded. We know that we have not reached anything like the goal we set for ourselves. Parents in general are very pleased with the school and our efforts to improve the educational environment of their children (witness the comments made by several parents to the author of the Parade article); the kids are happy and can regale you with reasons why they would rather to be in Kramer than any other school (see the comments in Appendix A); all of the teachers are committed to the importance of our task, and most see this task with something of the project director's evangelical fervor; and yet we have not yet "put it all together."

The Advisory Council Retreat

In preparation for this progress report, the project director arranged a two-day "retreat" in early February for all the major persons serving in an institutional advisory capacity to the project. No parents attended the meeting, as we do not perceive any real problems in our relations with parents. All of the supervisory staff attended part of the time, and for the remainder of the sessions only the project director represented the staff. Although not an official member of the Advisory Council, the new Dean of the College of Education attended the full time, and Little Rock's new Superintendent of Schools attended at least half the time. Also invited to attend was Dr. Marvin Fairman, a new faculty member in the College of Education, a specialist in educational administration.

In the opening session of this retreat, every member had an opportunity to make a position statement and to bring up any problems or issues needing attention from the group. Interestingly, there were no problems brought up that related to the conduct of the research. We seem even to have solved the traditionally difficult problem of conducting research in a public school without making people feel uncomfortable or defensive.

During this retreat it became increasingly obvious that our major problems, if we have any, are administrative rather than conceptual. Each sponsoring organization is fully behind the project, and each feels pride in our accomplishment. However, both the personnel from the College of Education of the University and from the Little Rock School District share the project director's conviction that our administrative lines are too fuzzy to permit the most efficient operation of the project.

In no place can this be seen more clearly than in respect to the project director's role in relation to the school principal. Within the guidelines of the Little Rock School District, the principal has the full responsibility for the operation of the school. Within the guidelines of this research grant, the project director has the final responsibility for the conduct of the project. Is the principal responsible to the project director? Is the project director responsible to the principal in terms of decisions that directly affect management of the school? Fortunately there have always been amicable relations between the principals who have been assigned to Kramer and the project director. But should that not be the case, how are difficulties to be arbitrated? Anticipating this role ambiguity at the outset, we conceptualized one and the same person as principal of the school and education coordinator of the project. In general, this has worked very well, and there has never been any sort of true confrontation between the "project" and the "school." But it could happen, and we all feel the need for greater role clarity in this respect.

This ambiguity of role definition is nowhere more apparent than in the elementary teachers. Although all teachers who have been appointed since the project began have been approved by the principal and the project director, there are still several teachers in the school who were there when we began and who did not necessarily choose to be affiliated with the project. Most of these teachers, we feel, would, if given a choice, remain at Kramer rather than move to another school. (One of the decisions made at the retreat, incidentally, was that every teacher would be privately interviewed and given such a choice before the end of the current school year.) However, even for those who asked for an assignment to the project school, the lines of authority are confusing. To what extent do they rely on project supervisors to assist in their educational and disciplinary problems, and to what extent do they look to the supervisory personnel of the District? No such conflict is apparent for the preparatory teachers, as they do not fall within the boundaries of the District supervision and thus must rely on project personnel.

Such ambiguity is no problem when all opinions about what should be done are in harmony. Nor is it a real problem when one needs something that cannot be obtained from one source--one simply tries the other source. But it is a very real and present danger when there is a difference of opinion about what is to be done--e.g., how to discipline the children, how to group into classes, whether or not to cooperate with a new and unliked practice teaching plan. At those times the oneness dissolves into the "We's" and the "They's"--"They are doing something in our school." A case in point: Recently when one of the teachers felt she had a legitimate complaint about the practice teaching situation, she talked about it to the principal (as she should). The principal reminded her that the plan had been approved by the Advisory Council of the Center, which has three representatives of the Little Rock School District on it, including the man in charge of practice teaching in all Little Rock elementary schools. As the teacher was still not satisfied, the principal asked for a meeting of the teacher, the principal, and the project director. At this meeting the complaint was heard, and it was indeed a legitimate one. The teacher has a large class of under-achievers with a grade-level spread of approximately five years. Because all practice-teaching students during the first month of the program spend some time with children in all age groups represented in the school, no teacher has a teaching intern full-time during this time. Obviously, the teacher needed help, and the project director indicated that the help could be provided by utilization of other project resources--having one of the preparatory teachers help out every day during nap period, having more of this particular teacher's children spend part of the day in the resource room, etc.--but that the student teaching plan could not be changed to allow her a full-time student at that time. We had agreed to try it for a full semester and then re-evaluate it, and had we given up at that time we would have never known how well it would work. At first the teacher accepted this decision, agreeing that what she needed was help, not merely another student. However, the next day she decided that she should call the Director of Elementary Education for the District and register a complaint--which, according to our understanding of the boxes on our administrative chart, she should not have done. No harm was done to either the project or the training plan, as the Director of Elementary Education backed up our decision to try the plan for a semester. However, the anecdote effectively illustrates why we are concerned about administrative ambiguities

Dr. Marvin Fairman, who participated in our planning retreat, is doing a study of the Kramer-project administrative structure and is making recommendations to those of us with responsibility for making future plans. These will then be reacted to by the Center's Advisory Council and be put into effect during the summer of 1972. We feel that this is an extremely important task and one which should not be delayed.

Research Plans

Several of our major research endeavors will continue right on through the summer and fall--LOIS (Longitudinal Observation and Intervention Study), AWARE (Human Relations program), and LEAP (Language Enrichment Activities Program). In the latter two projects, the summer will be spent analyzing data obtained this year and planning future strategies. Next year AWARE will be extended downward to the kindergarten and upward toward the fourth grade, and LEAP will extend downward to the infants.

One of the major changes needed in our research design is a way to cope with the fact that we have much greater mobility than had been anticipated. Families move into and out of the Kramer attendance area, and our goal of following a stable population of children all the way from preschool through the elementary years is proving unrealistic. Accordingly, we have been thinking about ways of continuing a high-impact type of subsequent enrichment for our children who have had the early childhood intervention. Although our concept is still a bit fuzzy, we should like to describe it at least briefly.

It seems to us that what is going to be necessary to test the major hypothesis of this study--that early intervention plus sustained enrichment will accomplish more for a child than either type of intervention offered in isolation--is sustained contact with the child, regardless of where he goes to school. Thus, even though we will not diminish our efforts to upgrade our elementary program, we cannot accept the loss of so many children who have been in our early childhood program. Obviously the families who move out of the Kramer area do not go to any one geographic area of the city or to any one elementary school. Thus it seemed to us that an individualized type of post-preparatory support was going to be necessary.

When thinking about the kind of person we needed for such an endeavor--someone who could help the family obtain needed resources or services, one who could tutor (like Doonesbury) who could help keep the motivated, who could be a special friend--the concept of the child advocate came to mind. It seemed that what we needed was a person who could, for an individual child, play the role of the child advocate. As we now conceptualize the task, we would like these advocates to work first with the families. However, if the families do not or cannot mobilize themselves to provide what the children need, then the advocates should offer direct help to the children. A homely example can be found in the time-honored custom of parent-teacher conferences in lieu of a report card in the primary grades. If the parent does not respond, the advocate will do everything possible to get the parent to attend. However, if the parent fails to appear, the advocate will be there for the conference. We will be working to refine this concept over the summer and plan to institute it on a pilot basis in the fall.

Improving Reading Instruction

For over a year now we have been eager to strengthen our reading program. Learning to read is a major task for the elementary school, and we have many children with moderate to severe reading problems. None of the original members of the senior research staff is a reading expert, and we have needed help from someone with competence in this field. We were delighted when Dr. Anna Heatherly, a new assistant professor in the Department of Elementary Education, expressed interest in being involved with the project and in strengthening the reading program. Beginning in the summer, Dr. Heatherly will be with us half-time, and in the fall she will initiate her own research into the reading process. We are particularly delighted with this arrangement, as we not only needed greater strength in this area but also find her approach to reading compatible with our own guiding developmental theory. Dr. Heatherly has prepared the following description of her proposed research:

Conservation and Reading Readiness

A recent article by Athey (1971) has stated that no model of language as it functions in reading presently exists, specifically, models relating language growth to the emergence of cognitive maturation.

Since reading is a product of both cognition and language,a clarification of the relationship between these two functions is necessary to understand the mental processes involved in reading.

The ideal model of language is one that will recognize the interdependence of cognitive maturation and language development, will clarify the respective roles of genetic factors and learning, will account for all the variables involved, and will take cognizance of the interaction among them. This research is designed to provide a partial model to explain how language functions for children of different ages and backgrounds in different social and educational contexts.

The research will not view reading as a "skill" or even a bundle of skills, but a system of social communication. In this view, the task of learning to read is not a matter of breaking down the reading task into a number of component skills and determining the order in which these skills will be taught. Instead, it involves above all the realization that the printed word is another system of communication analogous to speech. Hence as in spoken language where the child learns to behave according to a set of induced rules, learning to read means learning strategies for attacking and solving problems of recognition and meaning.

The research is based on the theoretical formulations of Piaget. The Piaget model suggests that beginning to read is an integral part of an overall language development.

That the attainment of conservation as measured by performance on Piagetian tasks may be related to beginning reading instruction is only suggested in the literature. Almy (1966) reported a high correlation between conservation ability and success in reading achievement for first-grade children in a middle-class school. A recent article by Raven and Slazer (1971) has suggested that the attainment of conservation may be what constitutes readiness. Ausubel (1962) has stated, "The child who has not achieved reversibility in his thought processes and who does not understand reciprocal relationships may lack the stability of perception necessary for formal reading instruction (p. 93)." It is reversibility, an essential component of conservation, which has been referred to by Henderson (1969) as the operation necessary to apply meaning to the printed page. One by-product of the work of Elkind and Deblinger (1969) in constructing perceptual tests based on Piaget theory, was the observation that the children who performed well on the tests were also better readers.

The major hypothesis to be examined through the research is that the attainment of conservation, which is a characteristic of the stage of concrete operations, is what constitutes readiness for learning to read. This criterion has been suggested by Raven and Saltzer (1971) and Heatherly (1971).

In terms of Piagetian psychology, the stage of concrete operations makes possible idea testing rather than simple word association. Herein lies a powerful implication for the concept of reading readiness--that comprehension, not word recognition, is the prerequisite for beginning reading. One should not expect children to begin to read in any meaningful sense of that word, until this necessary cognitive function has developed.

In order to examine the major hypothesis of the study, the following experimental conditions will be included in the research:

1) A series of conservation tasks will be administered to children in the study to determine the conservation status of each child. A standardized conservation test by Goldschmidt will be used as pre and post test measures.

2) Other variables such as chronological age, sex, IQ scores, and socioeconomic status may be considered.

3) Two groups of children will be grouped as conservers and non-conservers and will be taught to read using identical methods and materials. Differences in performance between the two groups will be examined.

4) Other groups of children grouped as conservers or non-conserves will be in other reading situations such as: basal readers, language experience groups, and materials of the Bereiter-Engleman type. Their language to a standard stimulus will be analyzed as well as their performance on pre and post measures of conservation attainment.

5) Specific experiences designed to help children achieve conservation status are also planned. These include experiences involving classification, seriation, and class inclusion problems. Other activities designed for conservation inducement will be based on placing the child in a situation involving social interaction. This would include activities such as reading to a child, mapping the behavior of the child during the activity, and interpreting the behavior in terms of Piaget psychology.

Summary

In this chapter we have highlighted a few of the plans for our project for the forthcoming year. Many other plans are in a formative stage and will be described more fully in future reports. Our main tasks for the period immediately ahead are to (1) obtain greater clarity in regard to our administrative structure, and (2) to adapt our research design to a population that is more mobile than we had anticipated. Without letup we shall continue our efforts to create in Kramer a "supportive environment" for all the children, for their parents, and for the staff.

References

Almy, M. Wishful thinking about children's thinking. In R. H. Anderson and H. Shane (Eds.), As the Twig is Bent. Boston, Houghton Mifflin Co., 1971, 75-87.

Almy, M., Chittenden, W. E., and Miller, P., Young children's thinking. New York, Teachers College Press, 1966.

Anderson, R. H. and Shane, H. (Eds.), As the twig is bent. Boston, Houthton Mifflin Co, 1971.

Athey, I., Synthesis of papers on language and reading. Reading Research Quarterly, Fall, 1971, VII (1), 9-15.

Ausubel, D. P. Young children's thinking and the teaching of reading. In Joe Frost (Ed.), Issues and Innovations in the Teaching of Reading. Glenview, Illinois, Scott, Forsman & Co., 1967, 89-93.

Elkind, D. and Deblinger, J. A., Perceptual training and reading achievement in disadvantaged children. Child Development, 1969, 40, 11-19.

Frost, J. (Ed.) Issues and innovations in the teaching of reading. Glenview, Illinois, Scott, Forsman & Co., 1967.

Heatherly, A., Attainment on piagetian conservation tasks in relation to the ability to form hypotheses as to the probable content of story material among first and second grade children. (Doctoral dissertation, University of Virginia), 1971.

Henderson, E., Do we apply what we know about comprehension? In N. B. Smith (Ed.), Current Issues in Reading. Newark, Delaware, International Reading Association, 1969, 85-96.

Raven, R. J. and Salzer, R. T., Piaget and reading instruction, The Reading Teacher, 1971, 24, (7), 630-639.

Smith, N. B. (Ed.), Current issues in reading. Proceedings of the Thirteenth Annual Convention, International Reading Association, 13,2, Newark, Delaware, International Reading Association, 1969.

APPENDIX A

KRAMER SCHOOL--SOMETHING FOR EVERYBODY

Bettye M. Caldwell [1,2]

There is an old journalistic slogan which suggests that the way to write a guaranteed best-seller is to write about God's mother's dog's flag. As each of these topics is in itself appealing, all of them together should be irresistible. In some ways, this formula applies to Kramer School -- or, more formally to the Center for Early Development and Education jointly operated by the University of Arkansas and the Little Rock Public Schools. We have come to be known as the Kramer Project because the public school in which our program operates is the Frederick W. Kramer School. We are content with this designation, as the label accurately describes our functional identity even if it does not connote our full range of activities.

Some Background Information

The Kramer Project came into being in 1969 through what was known as the "Special Facilities" grants program of the Children's Bureau. Each funded facility had to have demonstration, research, and training functions, and each had to relate in some way to the goal of improvement of the general welfare of children and families.

The author had previously directed a research-based day care and education program that offered comprehensive services to infants and young children and their families but which lost contact with the children when they reached public school age. During that time her conviction had grown that early childhood education would never significantly impact the children of America until it became part of public education. Also she was becoming increasingly aware that the chasm between early childhood education and elementary education had to be bridged. Accordingly she was resolved to try to help design a new program - a special facility indeed -- that would provide age-appropriate developmental guidance from early infancy through the end of the childhood years.

A move to Little Rock, Arkansas proved to be propitious for the pursuit of that goal, as personnel in the Department of Elementary Education of the University of Arkansas expressed interest in the idea and established contacts with the administrative staff of the Little Rock Public Schools, who pledged cooperation provided outside funding could be secured. An agreement was reached to designate one of the Little Rock elementary schools as the project school for a period of five to seven years. Responsibility for implementing the program in that school would be shared by the director of the project and the principal of the school with the help of guidance offered by an Advisory Council consisting of representatives of the University, the school district, and the State Department of Education. For the better part of a year a planning committee (see Footnote 1) met to work out details of the project, and finally a proposal was submitted to and approved by the Office of Child Development.

Selection of a Project Site

The project school was to be one which: (1) was located in a section of the city likely to have a sizeable proportion of low-income residents; (2) had a racially integrated population; (3) was in reasonably good condition, and (4) had incomplete occupancy which would allow room for the early childhood units. There was really only one school in the community that met all of those criteria (except the one about being in reasonably good condition!) -- Kramer School, situated squarely in downtown Little Rock, built in 1895 of an architectural style that can perhaps best be described as "American Ugly." The neighborhood itself is very interesting. Although technically integrated, it really contains assorted pockets of whites and blacks. It is surrounded on two sides by luxury hotels and apartments, and on the other two by a church and reasonably adequate housing. Around one corner is a fire station which every Wednesday at noon tests the city's civil defense sirens at such a decibel level that anyone having a tendency to audiogenic seizures had best go for an early lunch. One block distant is the city's Museum of Natural History, and just beyond that a beautiful art museum. Moving in another direction we cross a busy interstate highway which officially bisects the community into east and west (and our population into black and white). Moving in another direction we have the main hangout for the local hippie colony and the publication headquarters of the underground newspaper. In still another direction we find Little Rock's most famous house -- an antebellum mansion occupied by a gracious and alert 90-year-old woman who graduated before 1895 from the wooden school which preceded Kramer on its site and which burned down before the present school was built. In short, it is an interesting neighborhood, with many exciting things to see and do within walking distance. There is no comparable neighborhood in the entire city.

Kramer contains 13 classrooms plus an auditorium and a cafeteria and is considered a 300-child school. At the time the project was launched, there were only 150 elementary children in attendance. We have now added to that total approximately 100 children under six. This involves a total of 127 families and two foster homes. In addition to these children who are enrolled in the school on a daily basis, approximately 150 additional families are involved with the project through home visits and other research activities. Thus, altogether, the project touches the lives of approximately 400 children and their families. Of the total number of children, 60 percent are black and

40 percent are white. One-third of the children are from families receiving some type of welfare (AFDC, PA), and only three-fifths of the children reside in two-parent families. Sixty percent of the mothers are employed or in a training program. The modal occupation for both mothers and fathers is semi-skilled. Only 35 percent of the mothers and 59 percent of the fathers have a high school education or beyond.

Components of the Program

In Kramer we have blended together a number of program components, each of which in isolation would represent a worthwhile educational endeavor but all of which put together in the right combination represent something more -- an exciting program model worthy of consideration for adoption in other communities concerned with designing a school environment capable of meeting the needs of young children and their families.

What are these components that make Kramer a special school? No one in itself is unique, but, at the time the program was launched in 1969 (and even at the time of this writing insofar as the author knows), no school had put them all together in precisely this way.

1. A comprehensive early childhood program beginning in infancy. For over a decade now we have been aware of the importance of experience during the early years of life in enabling children to achieve their full developmental potential (Hunt, 1961; Bloom, 1964). During this decade early childhood education, always either a step-child or a petitioner for educational legitimacy, has gained a new lease on life. Experimental early enrichment programs (Gordon and Wilkerson, 1966) appeared in a few settings during the early sixties and, with the launching of Project Head Start in 1965, became available to large numbers of children in

America for the first time. Almost never, however, have programs for children younger than five been accepted as an integral part of public education.

Most of the new programs "backed down" gradually from public school entrance age which, depending on whether the state had public kindergartens, meant either five-year-olds or four-year-olds. An interesting paradox in this order of program development is that Hunt and Bloom were widely quoted as having marshaled evidence for the validity of educational intervention in this upper range of the traditional preschool years. Yet, Bloom's widely cited apothegm reminded us that approximately 50 percent of the development of a child's intelligence occurred by age four, not between four and five. Similarly, Hunt (1964) speculated that from about 18 months onward the social environment was particularly important in shaping the behavior of the young child. Had we not at that point in history been so justifiably phobic about the possibly deterious consequences of putting children younger than three into groups, more people would probably have moved promptly to design programs based on correct inferences from the data summarized by Hunt and Bloom.

These were especially meaningful in terms of conceptual analyses of early development of the situation of the young child from underprivileged backgrounds. It is during the early years of life that the child himself has the least capability of [illegible]ting or influencing his environment and is, at least physically speaking, [illegible] prisoner of his home environment. For years it was assumed that most home environments were equipotential in their pattern of influence during infancy and that is was only in later years that differential influence patterns could be detected. The absence of good descriptive data about the early home environment permitted this stereotype to persist. Now, however (Caldwell, Heider, and Kaplan, 1966; Wachs, Uzgiris, and Hunt, 1971), we have evidence that, quite apart from any inherent dimension of "goodness" or "badness," early environments contain as much diversity as is found in social and physical environments available to older children. It is in environments that we have come to designate by that curiously misleading term, "middle class," that those characteristics associated with developmental acceleration are found with greater consistency and in greater abundance. Quite apart from any argument as to whether home environments that lack these characteristics are deficient or simply different, one needs to be concerned with arranging for these characteristics if it can be demonstrated that young children need them in order to have an opportunity to develop skills and personality characteristics adaptive in the larger society to which all subcultural groups within a region belong.

Such is the strategy of the early education component of Kramer School. It is based on a literal reaction to the lines of evidence that give us a rationale for early intervention programs (see Caldwell, 1970), and that evidence unmistakably implies that the earlier the intervention the better. Although at this point in time we do not have empirical evidence (Caldwell, 1971) that enrichment efforts begun in infancy accomplish more than appropriate intervention begun later in the early childhood period -- say at age three or four -- in terms of the theoretical rationale for such endeavors the potential value of beginning during the earliest years cannot be ignored. Accordingly, Kramer does not involve backing down from first grade but rather moving forward from birth with activities designed to provide age-appropriate developmental supports.

In the early childhood component of our program, carefully arranged educational experiences are provided young children from early infancy right up to the age of formal entry into public school. (In Arkansas this is still age six, as public kindergartens are permissible rather than mandatory and are available largely through private sources or through federally funded programs for children in low-income families.) From the age of six months onward this may be either in the form of home intervention offered on a biweekly basis or in the form of enrollment in the formal educational program offered on the school premises. For those participating in the on-site school program, enrollment may be either for half a day or for the full day, depending on the family employment situation. In terms of the amount of physical space available in the building and the size of the available staff, approximately 100 children can be enrolled in the school program.

One of the things that makes Kramer unique is that these 100 children younger than six go to school right in the same building with their older brothers and sisters. This, of course, has been true for public kindergarten for many years and even for pre-kindergarten groups (usually just four-year-olds, though occasionally including three-year-olds) since the establishment of Head Start. As Kramer is essentially a big cube holding up an assortment of the turrets and towers and gables considered architecturally stylish in its day, there are no separate wings into which the little ones can be secluded and no partitionable playgrounds that can be assigned separately to older and younger groups. Rather the classes for the younger children are geographically contiguous to those of the older children. The only exception to this arrangement is the contingent of babies, who, because of lack of suitable space in the main building that met fire and safety standards, attend in a portable classroom situated on the school campus. This immediate proximity of younger and older children facilitates many types of cross-age activities which, in a more architecturally ideal physical setting, might be arranged only with difficulty. It means that two or three children from special education can help in the toddler room during snack time or lunch, that several kindergarteners can do the same thing for the babies, that the fifth graders can arrange and give a Valentine party for the three-year-olds, and so on. And, indeed, activities such as these are everyday occurrences at Kramer. It also means that when we have assemblies or special programs, the sixth graders can give the caregivers from Baby House a rest, and feel very grown-up and nurturant at the same time, by holding babies on their laps during the program. And it means that parents who are also encouraged to attend all such programs can gather together all of their young children and participate in the experience as a family group.

In terms of the static aspects of the early childhood part of the program, the children are enrolled in groups that are reasonably homogeneous in terms of developmental level -- babies, toddlers, threes, fours, and fives. There are 12 babies and 16 toddlers in the two youngest groups, and anywhere from 20 to 25 in each of the three remaining groups. The adult-child ratio is kept at 1:4 in the two youngest groups, 1:5 in the threes, and 1:6-8 in the two oldest groups. As absenteeism tends to be high in the youngest children, we deliberately over-enroll in both the baby and toddler units in order to avoid under-utilization of the facility.

If in our old building we had more open space areas we would encourage multi-age grouping more than we are now able to do. However, in many ways we had to design our program to fit our building, and our cube is divided into self-contained classrooms. In such a setting, activity and rest cycles correlated with age are hard to ignore, no matter how much one might wish to group children heterogeneously with respect to age. Last year, for example, we found ourselves in a disastrous situation with our infants and toddlers who were together in the same portable classroom. One small bedroom containing six cribs had been partitioned off so that the younger infants in the group would have a separate place to sleep. On paper it should have worked. But what defeated the arrangement was the fact that most of the babies wanted to go to sleep around 11:00 or 11:30 a.m. -- which they were permitted to do -- whereas the toddlers were not ready for a nap until 12:30 or 1:00 p.m., by which time the infants were ready to get up and begin to play. In the absence of an area large enough to permit separate sleeping areas for both the early and the late resters, these incompatible activity cycles made it necessary to divide the infants and toddlers into separate geographic areas for the major home base assignments. However, in our setting it is easy to find opportunities to bring various groups together for parts of the day. In fact, all of the children except the youngest infants who come to school before 8:00 go into a common receiving area, and all who remain after 3:30 are regrouped into a heterogeneous age group where they remain until their parents come to take them home.

Because our entire educational effort, including our home intervention program, operates out of a public school, we have eschewed the labels "preschool: and "preschoolers." It seems rather foolish to speak of our toddlers as "preschoolers" when they attend school every day, just as do their older brothers and sisters. Also, as part of our conscious effort to unify the entire program and to break down the implicit chasm that all too often appears to separate early childhood education from elementary education, we did not wish to refer to part of the program as "school" and to another part as "notschool" (which is a logical translation of "preschool"). Occasionally, however, it is necessary to refer to that part of the program which deals with children under six, and unless we wanted to remain unified to the point of semantic absurdity we had to come up with a descriptive phrase. Accordingly we refer to the children simply as "younger" and "older" and the program components as "preparatory" and "elementary." Although the term "preparatory" has within it some of the same contradictory elements as does the term "preschool" (we are not technically preparing the children for school or life, as they are participating in school just as they are living life), it was the best compromise we could come up with at the time we needed a designation. We rather like it.

2. A dynamic elementary program offering continuity of developmental support. A few years ago many of us who were impassioned advocates for more early education made it sound as though we believed that enough programs would solve all of the problems of poverty, would eliminate school drop-outs, and would make equal educational opportunity more than empty rhetoric. By creative intervention during the early years of life, the child could possibly be changed in such a way as to make him thereafter more receptive to whatever educational fare might be forthcoming. This assumption rested on the translation of what has been called the "critical period hypothesis" into the field of human development (see Caldwell, 1972). As the early years were critical for supporting cognitive and motivational development, corrective programs instituted during this critical period would hopefully produce changes which would sustain the child through any subsequent experiences. When early evidence began to accumulate that it was not that easy (Karnes, 1969; Westinghouse Learning Corporation, 1969), some pushed the panic button and began to claim that the early experience was not critical after all. But, with the wisdom that comes with hindsight, it now seems naive to have assumed that a small

slice of enrichment early in the life cycle could have produced permanent changes. If behavior at any point in time is an integrated function of the individual's genetic potential, his pool of accumulated attitudes and skills, and of his current environmental situation, then it is fallacious to assume that one could ever expect the work of the environment to be completed.

The program implications of this point are obvious: no matter how effective an early enrichment program might be, it must be followed by exposure to an environment offering a proper match between the child's previous achievements and the experiences offered in the new environment. If children who do make substantial gains in an early childhood program are placed in an elementary program planned on the basis of previous expectancies rather than on the actual achievements of the children, then the same rate of progress should not be expected.

This continuity is the second major component of the Kramer program. Upon completion of the early childhood program, the child simply goes right on up the educational ladder. By conscious design the kindergarten and the first primary classroom are adjacent to one another, and some children move back and forth between the two areas for part of the day. In our setting this made more sense than having the two classrooms duplicate one another in certain respects. For example, there are several children in the kindergarten who, by any standards, are "ready" to learn to read. Likewise, there are a number of children in the primary who need a great deal of readiness work. Rather than either permit each teacher to ignore these indicators of developmental progress in the children or require each one to complicate her teaching strategy to accommodate the children whose deviation from the performance level of the remainder of the group is extreme, we have arranged a simple exchange. The main work period in the kindergarten happens to coincide with the reading period in the primary classroom, so the kindergarten readers and the primary non-readers simply change places. The teachers on either side of the exchange remain alert to indicators that the arrangement is indeed providing a proper match for the children's continuing development, and change can be made quickly in the event it should be needed.

In limited space it is not possible to describe all components of our elementary program. The underlying educational philosophy is identical to that which guides the preparatory program. We have referred to our program as representing an ecological model -- i.e., one which is concerned with environmental design rather than curriculum development. Our ambitions for that environment are quite expansive. We want it to be one in which the children can develop maximally as integrated social-cognitive-emotional-physical-moral human beings -- in short, a supportive environment. Furthermore, we want them to be happy in the process, and we want their behavior to be so reinforcing to the teachers and other personnel in the school that their jobs are perceived as rewarding and fulfilling.

We conceptualize the school environment as consisting of human, physical, and temporal factors, all of which taken together comprise the ecological system of the school.

Human factors involve all the social interactions between adults and children, children and children, and adults with one another. They include the emotional tone of the interactions, the extent to which encounters between children and teachers will be pleasureable rather than painful, and whether they convey mutual respect and love or disdain and hostility. Physical factors include all the teaching materials and equipment and the arrangement of space in the school. Although we think of physical factors as being less important than the human factors in the school, they do indeed set limits for program operation and must be given careful consideration in environmental planning. Temporal factors refer to the organization of events throughout the school day, to the way things are put together. They can thus be consonant or dissonant with the child's needs for activity and rest and with limits of attentiveness set by his own physiological maturity and style of reacting.

The ecological system of the school overlaps and must be coordinated with the ecosystems of the home and the larger community. One of our operating premises is that the greater the consistency among these ecosystems, and the greater the extent to which all encourage and support the same patterns of development, the easier will be the developmental task of the children. In all training endeavors, an attempt is made to help staff members think creatively about how these factors can be programmed to help the children progress at their optimal rates.

Our planning for the elementary program has been sensitive to the voices of responsible criticism of public education (e.g., Bruner, 1960; Cremin, 1961; Goodlad, 1966; Schaefer, 1967; Berman, 1968; Silberman, 1970). It might be described as currently lying about midway on a continuum ranging from a highly structured program on the right to a completely open program, and moving toward the left. Our task in the elementary division has been entirely different from our early childhood task. The latter program we developed and started; the former we have had to influence. It is not easy to change a school, as thousands of people who have tried in the past will testify.

We have been at the task for about 18 months at the time of this writing, and we have many tangible results to show for our efforts. The total elementary school is now non-graded, and there is considerable movement of children from one classroom to another for participation in activities that might more appropriately match their interests and achievements. The old library has been converted to a Learning Center (similar to what is called a Media Center in most schools) where remedial work is offered in reading and math and where children can pursue interests individually. We have added an exciting and highly appealing physical education program and an art program. We have arranged weekly assemblies during which ethnically relevant and culturally enriching programs are presented with the children themselves involved in many of the programs. One classroom has been set up and called the Alternative Room. The activities of this room are highly fluid and last only as long as needed to trouble-shoot some particular problem. For example, for an entire semester it operated as a transition classroom for approximately half of the early primary children who were not able to respond to instruction in reading and math within the range appropriate for the remainder of the class and who were so volatile and impulsive as to need a more carefully controlled classroom and more behavioral supports in order to show developmental progress. This year the Alternative Room is being used for children who are simply unable to function in their regularly assigned home classroom, generally because of behavior problems. We find this an extremely valuable adjunct to the program and now wonder how any school can function without such a service.

Teaching activities for both elementary and preparatory divisions are guided by a lengthy list of objectives formulated in the areas of communication (reading and language arts), math, social living (social studies), and personal development. The objectives are stated in the first person and are intended to serve as progress reports to children and parents as well as teaching guides for the instructors. The lists of objectives are not considered to be exhaustive, as it is expected that every creative teacher will permit the children to pursue their own individual interests in every aspect of the curriculum. Nor in many instances are they presumed to have been sequenced perfectly. Most emphatically, a stated objective is not expected to carry with it a prescription of how the objective is to be achieved. Quite the contrary. One of our instructional premises is that there is no one technique that will work with every child, and we are organizing a curriculum library around these objectives to provide hints as to multiple ways of approaching each objective. Furthermore, it is expected that, insofar as possible, achievement of the objectives should permit the child to take the initiative, with teacher intervention offered only as needed.

As stated above, we still have a long way to go in making our vision for the elementary division become a full reality. It will be some time before the full educational impact of the program can be understood. At this time, for example, we have achievement data on only one group of children who had participated in at least one year of the preparatory program and who have gone through at least one level of the elementary program. These children tested higher on a group IQ test than a comparable group of controls attending another Little Rock school but did not show any substantial acceleration in reading or math. We are convinced that there are dramatic differences in the children's attitudes toward adults and toward authority in general. Almost every visitor comments, for example, on how friendly and loving the children are to their teachers and other project staff members. As we are constantly monitoring their development in many areas, we will soon be able to substantiate what kind of change is occurring, how much and what type of this change is associated with participation in the early childhood component of the school and how much is due simply to changes being instituted at the elementary level.[3]

One of our most disconcerting problems is that there is less geographic stability in the participating families than we had expected. Recently, the Little Rock Housing Authority took over six square blocks that lie within our attendance boundaries, an act which involved 77 children enrolled in Kramer. An interesting comment on the extent to which the families perceive our program as offering them something of value can be found in the statistic that the families of 83 percent of the children under six found ways to continue to bring their children to Kramer, whereas only 20 percent of the elementary children were returned, even though in some instances a family might have been transporting younger children to the school. Granted that there are important reality factors in the situation (wanting children to establish friendship patterns in the new neighborhood, convenience associated with attendance at a school closer to the new address, etc.), we have interpreted this as indicating that as yet we do not have a community image of being an elementary school worth taking extra effort to attend whereas we apparently do have that image at the preparatory level.

3. Day care for all children who need this service. Those who are at all familiar with this author's point of view that day care can most logically and economically be expanded by establishing a liaison with public education (Caldwell, 1971a, 1971b) will not be surprised to learn that Kramer is an extended day school. The school opens at 6:30 a.m. and closes at 5:00 p.m., and all children of whatever age are welcome throughout that period. As would be expected, greatest use of the day care component is made by the parents of the very young children, although a number of primary children remain for the extended day. One of the criteria by which the appeal of the school for the children can be determined is that the great majority of them arrive by 7:30

to 7:45 in the morning, although school does not officially begin until 8:30. Breakfast is served to the early arrivals who indicate that they were not fed at home. In the late afternoon many children who do not actually need after school care remain in order to participate in the organized playground activities. The boys have had an opportunity to participate in a city Boys' Club intramural sports program, and, because of the expert coaching they receive from their physical education instructors, have walked away with most local sports trophies since the program began.

We had originally planned to use the surplus time in part to strengthen the cognitive program -- i.e., offer tutorial help, remedial classes, etc. During our first year we found out what we should have been wise enough to anticipate even without the experience -- tutorial help is not what the children want at that time of day. The older children in particular need to be active and free of too much supervision, and we have tried to accommodate those needs while still ensuring safety. The most popular late day activities are organized games and recreation, usually following a seasonal pattern, and art. Sesame Street happens to be telecast in our area in the late afternoon, and the younger children who remain late are encouraged to watch that.

The school is licensed as a day care facility by the Arkansas Department of Social and Rehabilitation Services, and all the traditional day care supports are offered as a regular part of the program. In our early days we ran into some interesting problems associated with the fact that Health Department requirements are not identical in school facilities and day care facilities. Sometimes we could meet one but not the other, and, whenever there was any disparity, we were expected to meet the more stringent of the two. Reconciling such differences was actually a fairly easy job, however, and we heartily recommend more unions of this sort.

It has not been a marriage without problems, however. For example, when school holidays come around, it is always hard to remind the staff that the day care facility must stay open in order to be of service to our families. Similarly, those who must come to work very early can feel resentment when they see other staff members come in later and possibly leave earlier. Also, for the first year of our operation, it was hard to get across the idea that it was all right for the elementary children to remain after the formal school hours. In most of the schools across this nation, there is almost always one staff member whose duty it is to get the children out the door and off the campus as quickly as possible! It is not easy to break up old patterns such as this one.

New ideas usually sell themselves when they are recognized as offering something of value, and the day care component of the program has gradually won converts from among the traditional school personnel in terms of the service it offers. Before the project began, the principal used to come to work and find 50-75 children standing outside the door wanting to come inside, no matter what the temperature or weather. Similarly, in the afternoon, there were hazards associated with unsupervised play activities on the school grounds. Now the availability of qualified personnel to provide a program for the children early and late so that the regular teachers need not feel either guilty at not responding to the children or frustrated that they cannot plan and get ready because of the premature presence of children in the classrooms has convinced essentially everyone that all schools should offer extended day programs.

One final point should be made about the day care program. Unless their parents work so that there is no one at home to care for them, children are not encouraged to remain at school for the extended day. This applies to the younger as well as the older children. That is, we have as a strong component of our philosophy the importance of strengthening family ties, and we do not wish to encourage dilution of parent-child contacts merely by the avilability of the extra school coverage. An occasional exception is made for children who especially need to be in the program whose mothers might decline to enroll them for a half-day only, claiming that it is too much trouble to get them dressed for such a short time!

As stated earlier, admission to Kramer was originally determined solely by geographic residence. Previously the population was well-balanced racially, but during the present year there has been a slight decrease in the proportion of whites in attendance. As we want to keep a population that includes a social class mix as well as a racial mix, we felt the need to enroll a few more middle class white children. Several of our teachers who were securing day care for their own young children elsewhere were very eager to enroll them in Kramer. We saw in their interest an opportunity both to be of further service to our staff and help maintain a racial balance. This is working so well that we would like to evangelize so that the service could be available to all young teachers. There is something very heart-warning about seeing a young mother-teacher go to play with her baby on her break rather than rush to the lounge for a cup of coffee.

4. A broad research program in child development and education. Reference was made earlier to the fact that the Kramer project is jointly sponsored by the University of Arkansas and the Little Rock School District. Although the university was obviously interested in the challenge offered by the opportunity to influence public education and participate in the endeavor to design a model school, the opportunity for the conduct of significant research in the setting

was an even more powerful determinant of university interest. In this paper it is not possible to give more than a brief description of the many research activities that are part of the project. They range from the macrostudy -- the development and evaluation of the impact of the total project concept -- to microstudies which may be carried out over fairly short periods of time and which deal with circumscribed questions of relevance for the total project.

The leitmotif of the research program concerns the influence of the environment on the development of the child. More specifically we are concerned with such research topics as: home factors influencing early learning, interrelations among different types of learning (cognitive, social, emotional); the predictability of early performance; the development of internalized behavioral controls; naturalistic studies of classroom and home behavior; the relative effectiveness of different types of enrichment models; the development of a human relations program for the elementary school; the utility of pre-reading training designed to foster the acquisition of conservation; the development of a language laboratory for two- and three-year-olds; consonance and dissonance between values for young children espoused by parents and advocated by the school. Different people on the staff are responsible for the direction and conduct of the various studies, and reports will be forthcoming as the projects are completed.

We are especially pleased that our research is conducted as an integral part of the school program, not as an extra feature that has to be grafted on to the regular activities. A possible reason for this is our dedication to a fundamental policy relating to all research personnel: everyone, including the director, is expected to give some time to working directly with the children in a service capacity. All full-time research staff are required to spend at least one hour per day in such work. This sharing of what the teachers clearly regard as the most demanding part of the work load helps create and maintain good morale and helps to keep teachers and researchers attitudinally on the same side of the fence. We feel that it helps to avoid the friction that can develop when one group is seen as "doing research" on the other group. This improved cameraderie is essentially a bonus from the policy; it was instituted primarily because of the director's conviction that one learns about children and generates researchable ideas only by interacting with them.

5. A comprehensive array of supportive family services. As would be expected from the description of the Kramer neighborhood, the school is not situated in a part of the city with cohesiveness among the residents and a strong feeling of community. Although the school is racially integrated (as are virtually all of Little Rock's schools, contrary to the national stereotype), the neighborhood is not. Rather it contains pockets of white housing and pockets of black housing, sections inhabited by stable, long-term residents, and sections where people come and go when the rent is due. In addition to the lack of cohesiveness, it is an area in which most of the mothers work. As the situation changes from time to time it is difficult to give a definitive figure, but about 75 percent of our mothers are employed most of the time. In one of our current classrooms, for example, we have one non-working mother, and in the Baby House all mothers either work or are in training. These data are mentioned at the outset to make it clear that it has not been easy to develop a dynamic family service program.

The staff assigned primarily to family-oriented work consists of two social workers, one school psychologist, and one aide. Within the project they are referred to collectively as representing "supplementary services." One of the social workers handles the enrollment of children into the program, serving as an information officer who lets the parents know what can be expected in the school, fills vacancies when they occur, makes home visits both to obtain and to give information.

Internal duties involve such things as enrolling children in the program and maintaining contact with families on the waiting list, contacting families of chronically absent children (of whom we have very few), helping acquaint families with community resources that the family might benefit from, arranging for clothing and food distribution to needy families and coordinating periodic rummage sales, maintaining and operating a toy lending library, providing a school guidance service for all children showing learning or behavior problems, offering individual or group therapy to disturbed children, coordinating coffee hours for all parents -- and on and on.

But the supplementary service personnel also have duties which deal with the interface between the community and the families. Monthly meetings are held with a small group of parents who serve in the capacity of a "parent sounding board" (the group was originally designated by the formal title of Community Advisory Council). The purpose of this group is to bring to the attention of the family service worker who serves as chairman and thence to the project director any developments within the community that have relevance for the project. Although subtle efforts have been made to encourage concerns with the larger community, most of the topics brought up by this parent group relate to the school -- whether the teachers are too easy or too hard on the children, how the groups can be monitored as they walk to or from school, what can be done to improve the playground, etc.

In a program such as we have at Kramer, it is possible for family-oriented activities to touch many families lightly or a few with intensity. Although hopefully there is some impact in even the fairly superficial contacts we have with families in such activities as enrolling a child or checking on an absence, our own perception is that our pattern of significant influence involves a very small number of parents, mainly mothers. Essentially it is the same mothers who habitually volunteer to help arrange coffees, who turn up for the parent discussions, who sit on the advisory group, who check out toys for their children. From what we have read (Chilman, 1972) and heard from others engaged in similar ventures, most other programs have the same experience. How to reach the unreachable families remains a big challenge for the future.

6. A training program for staff and students. Our training activities may be divided into the traditional pre-service and in-service activities. As the school virtually never closes, it is difficult to find a time for the pre service program when all staff members can attend. We have managed to find this time in the late summer each year. This is a time when many families are away on vacation and when the need for day care is diminished. At this time the building gets a thorough cleaning and the floors are freshly varnished, and the staff holds a one or two-week training workshop. There are always some carry-over personnel and some new personnel, so in these training sessions an attempt is made to give new personnel short courses in the history and philosophy of the project and then have all participants consider together the important planning and learning and preparation that need to be undertaken prior to the fall opening.

The in-service training goes on throughout the year. To be on the staff of Kramer is to assume the attitude of a student -- we are all learning all the time. This attitude appears to come rather easily to people in early childhood education, as, having been step-children of formal education for so long anyway, they tend to be a bit self-effacing and to assume that they cannot know anything very important! Facetiousness aside, in the author's experience, most teachers of young children appear to enjoy seeking new knowledge and trying to develop new skills. Our credentialing system makes things somewhat different with our elementary and secondary teachers -- they know how to teach, and they have certificates to prove it! And, of course, they are right. They do know how to teach, and the educational Cassandras who are crying out that they are doing everything wrong probably have spent precious little time in a classroom and have perhaps not coped without interruption for a single day with a roomful of children.

Even though this author does not consider herself to be a harsh critic of our school system, and though she decries dramatic declarations that our schools are sick, or dead, or are killing our children, the very idea of this project implies that somehow the elementary school must not be doing a good job or there would be no need to try to modify it in order to provide continuity of enrichment for the children who had been in the early childhood program. Thus it would appear that a social scientist might expect from the outset differences in the attitudes toward the project shown by the preparatory and the elementary teachers. To the one group, the idea of the project translates to the third ear as: "What we do is great. There is not a program in existence that gives enough children exposure to our talents and skills; therefore, we must develop such a program." To the other group the project concept translates more like this: "There is something drastically wrong with the way we are now doing things. If this were not so, the children who go through our classes would not have so much trouble and demonstrate so many learning difficulties. If we were doing things properly, certainly the little children who have the necessary experiential background would continue to make progress and would not develop academic and behavior problems."

These hypothetical messages are elaborated here, as it is our conviction that our aim of developing a unified early childhood-elementary school program was placed in jeopardy from the outset by these different implicit attitudes called forth from personnel in the two divisions. Therefore, one of our major training aims has been to help us all see our task from the same vantage point.

In a day care school, this is not as easy as it might sound, as it is virtually impossible ever to get everyone together. Our partial solution has been to arrange movies for the children once a week an hour before regular dismissal time so that the bulk of the staff can get together for a Faculty Forum. Teacher aides and the part-time physical education teachers supervise the children during this time. This does not solve the problem of getting teachers and aides together at the same time, but it does at least get the teachers from the lower and upper divisions together.

Topics for this Forum are about evenly divided between sessions in which new ideas are introduced (either by a staff member or an outside speaker) and sessions in which problems are discussed and solutions sought. Because of her own lack of experience in public school settings, the author was unaware of the extent to which this sort of "luxury" was unusual (at least in our community) for elementary teachers. Most schools have faculty meetings only once a month, and these are largely consumed by announcements and discussions of assignments; they are seldom forums for the exchange of ideas. In our meetings we have proceeded from polite listening to a willingness to bring up controversial topics and to be critical of some aspect of the program. (There must still be some feelings of inferiority on the part of the preparatory teachers, for, while I can think of instances in which an elementary teacher criticized something being done in the preparatory division, I cannot recall any instances of reverse criticism.) These sessions in general have been extremely stimulating and rewarding, so much so that they are now being attended by supervisory personnel from the Little Rock School District and by other interested persons in the community. In addition to these large group sessions, many ad hoc training sessions are arranged throughout the week to make new plans or try to work out problems. Finally, staff training includes the provision of training modules of varying dimensions on request -- e.g., a four-week unit on behavior modification, a ten-week refresher on methods and materials, a semester course on understanding elementary statistics. It has been our goal to arrange for all staff members who participate in these training sessions to receive appropriate university credits for their involvement; to date, however, this has not been possible. It is easier to influence an elementary school than a university!

Although it unpleasantly suggests a "separate but equal" philosophy, the necessity that someone must always mind the store has mandated a different training program for the teacher aides. This is true only of in-service training, incidentally, for in the annual pre-service workshops the entire staff meets as a single body. Our experience has been that, short of having a skilled discussion leader symbolically pull their teeth, the aides will not talk when the training session includes the teachers and other professional staff members. In the Aide's Forum, practical skills have been emphasized, but at the same time they have received an excellent background course in child development. At the time of this writing, the aides themselves are in the process of writing a training manual for others in similar situations.

The remaining major component of our training endeavors involves university students. These are either graduate students who take courses taught by one of the staff members who also hold academic positions in the university, advanced doctoral candidates doing their dissertation research under the guidance of the author, or undergraduate students doing practice teaching. It is only with the last group that our training program is unique and merits description here.

The practice teaching students come to us during their last semester -- after having completed all their foundations and methods courses but often with little or no practical experience in working with children (certainly with no sustained experience). All students declare in advance the grade level (though we are nongraded) with which they prefer to work. In addition to their teaching internship, the students also take with us a nondescript course called "Senior Seminar," intended to be an introduction to the world of the professional teacher.

Obviously the most salient feature of Kramer is the wide age range of children participating in the program. What better environment could one find to help give students that often praised but seldom achieved "developmental orientation"? Thus, even though the students had requested a particular level in advance, we wished to expose them to children throughout the available age range. The two major divisions (preparatory and elementary) were each subdivided again, resulting in four quads: babies-toddlers, three's to five's, primary, upper elementary. Each student elects to major in one of these quads and to minor in another, and each is assigned to all four quads for some period of time during the semester. For the first month the students rotate among the quads, getting to know the children and mainly observing the teachers. During the second month they move into their major classrooms for three days a week and spend the remaining two days in their minor quad. Their responsibilities are limited, and they mainly carry out assignments given them by the master teachers. In the third month the major-minor division becomes 4:1, and they are given progressively more responsibility both for planning and execution. Their classroom assignments will for the most part be directed toward one or another subgroup of children. In their final month, they are expected to demonstrate their ability to plan daily programs independently, though their plans must still be approved by the master teacher. This gradual build-up of responsibility reaches its culmination during the last two weeks of their assignment, during which time they handle the class independently.

Throughout this time an attempt is made in their seminar to relate their classroom experiences to philosophical and theoretical formulations to which they have been exposed previously (or to which they need exposure). They are videotaped twice during the semester in a microteaching situation, and these tapes are critiqued in the seminar. They also participate in the regular Faculty Forum.

An additional feature of the training regimen is that early in the semester they select one child in the school (not one in their major quad) with whom they form a "big sister" or tutorial relationship. They are expected to get to know this child, meet his family, help him with assigned homework, take him on a special outing, etc. Their experiences with this one child are then written up as a case study -- the traditional child development assignment -- with inferences drawn from what they learn about that child to the kinds of educational experiences that we need to try to provide for similar children.

We have just completed the first semester in which this training program has been implemented; undoubtedly we will make minor changes in the future.

Although the teachers have reservations about its value (they prefer to get a student early in the semester and keep him or her), the students are ecstatic about it. In fact, they are so complimentary that we think something must be wrong -- students are just not that prone to approve things these days. We hope to be able to follow the careers of these young people who have had their initial exposure to the world of teaching via this developmental approach. Only then will we be able to know whether it has accomplished our aims for it.

Dissemination of the Model

There is something very rewarding -- if a bit burdensome -- about involvement in a program that everybody finds intriguing. Such has been our experience at Kramer, for, to be sure, it represents an idea whose time had come just when we got it started. We have no public relations person on the staff but get calls from the local newspapers and television stations asking us what is happening that they might report. Under our official title (The Center for Early Development and Education) we were selected by the National Center for Educational Communication as one of the Model Programs in Childhood Education described in a brochure at the 1970 White House Conference on Children. I have personally described the program to thousands of people all over the country and have written about some aspect of the program for both scientific and popular publications. Our widest and most powerful diffusion came from an article in Parade magazine published early in 1972; the response to that article has to us been almost unbelievable.

During our first two years of operation we have hosted over 2,000 visitors who have seen the program and talked with various members of the staff. We like to think that each of those persons is now an ambassador for the concept. Although we enjoy the visits of other parents in the community who have heard about Kramer and want the same kind of opportunity for their children, of persons who want jobs, of classes of nurses or home economists or undergraduate teachers or psychiatric residents, we are especially pleased when we have school superintendents, model cities coordinators, Department of Welfare personnel from other states, Four-C coordinators, legislative aides, and others who can directly influence their communities to try to establish such programs in other areas. Their questions are always cogent: How much does it cost per child? (A lot.) How did you get the university and the school district to cooperate? (It was easy.) How do you manage in a building like this? (It isn't easy.) Where do you get your money? (The Office of Child Development mainly, with some from both operating sponsors.) How do you staff the long day? (Stagger the work hours; find some people who can work split shifts if possible.) What would you do differently if you could start all over again? (Either begin with a totally new elementary staff that would not have previously taught in the project school, or else involve all existing staff in the planning from the first stages.) For how long was your grant approved? (Five years.) What will you do when it runs out? (Like Scarlett O'Hara, I'll think about that tomorrow.) Do you offer consultation to other communities that want to try to do this kind of thing? (Have speech, will travel.) They all imply that someone is going to go right home and get to work.

Summary

In this paper I have attempted to present the major features of one prototype of a school for tomorrow which has the good fortune to be in operation today. In the words of my title, it is the kind of school which offers something of value to everybody associated with the endeavor, to the staff no less than to the children and parents. In its program design the school links together early childhood education and elementary education, education and day care, education and research, and the home and the school. Each of these linkages forms a symbiotic relationship in which eacy component enriches its opposite. Although keeping it all together has not been easy, one could hardly claim that it has been truly difficult.

This description is being written before enough time has elapsed to demonstrate whether the major question posed by the facility can be answered -- viz., can an environment be designed which will provide the experiences necessary to nourish development during the early years and necessary to sustain that development during the years of middle childhood. Therefore, perhaps it would be appropriate to conclude with a paragraph from our original proposal which, better than any we have managed to write since that time, effectively communicates just what it is we are trying to do in the program here described:

> "Before being promoted out of the school, it is hoped that each child will have acquired a love of learning, will know how to adapt to group experience, will have mastered thoroughly the rudiments of reading and mathematics, will have experienced a cultural milieu rich enough to enable him to meet all subsequent school experiences without apology, and will have made substantial progress toward becoming a responsible citizen. Similarly it is hoped that each child's family will have realized that education is not something that is done for a child by a school system but rather is a continuing process in which the child, the parents, the school, and the community work cooperatively toward the goal of further development for all who are involved in the process."

Footnotes

[1] Center for Early Development and Education, College of Education, University of Arkansas, 814 Sherman, Little Rock, Arkansas 72202. The author's work is supported by Grant No. SF-500 from the Office of Child Development, Department of Health, Education, and Welfare. Although this paper carries a single authorship, the project described represents the work and the ideas of many people, at least some of whom the author would like to mention. Important contributions to the original plans for the project were made by Dr. Irvin L. Ramsey and Dr. Robert M. Roelfs of the University of Arkansas, by Mr. John Fortenberry, Mr. David C. Wallace, and Miss Imogene Hines of the Little Rock School District, and Mr. Lowther Penn of the Arkansas State Department of Education. Within the staff special appreciation is expressed to Dr. Phyllis T. Elardo and Dr. Richard Elardo of the Research Services, to Mrs. Elaine Barton and Mrs. Faustenia Bomar, Principal and Vice-Principal, respectively, of the school, and to Mr. Stephen Lehane, Training Coordinator. The author would also like to acknowledge the contributons of former staff members Dr. Jerry D. Perrin, Mrs. Martha Jane Moose, Mrs. Rosanne Gmuer, and Mr. William S. Parker. Most importantly it should be recognized that the project could not operate a single day without the work of the dedicated teachers, aides, research assistants, supplementary service and clerical personnel. Finally, to the Kramer children and their parents goes my appreciation for remaining such good sports about being visited, interviewed, and innovated. From all of these components has the Kramer model emerged, and without any part the system would break down -- "E pluribus unum."

[2] To appear as a chapter in Braun, S. J., and Edwards, E. P., History and Theory of Early Childhood Education. Worthington, Ohio: Charles A. Jones Co., 1972.

[3] Children's perceptions of operational realities are always interesting. Recently I interviewed a group of our sixth grade children, all of whom had attended before Kramer became a special project school, to find out what they thought about the school. In response to my question, "How is Kramer different now from the way it used to be?" the children gave the following responses in the order given: "We change classes more; we go from room to room; we get to watch TV some; we go on educational trips; the preschool; we got two coaches; we changed the rules from girls playing on the girls' side and boys' on the boys' side to all the kids playing everywhere; the art; day care; and the school is open all summer." No talk about a supportive environment, but they seemed to be picking up the concrete changes that reflect our attempts to develop a more flexible program offering greater freedom to the children.

References

Berman, L. M. New priorities in the curriculum. Columbus, Ohio: Charles E. Merrill, 1968.

Bloom, B. S. Stability and change in human characteristics. New York: Wiley, 1964.

Bruner, Jerome S. The process of education. Cambridge, Mass.: Harvard University Press, 1960.

Caldwell, Bettye M. Impact of interest in early cognitive stimulation. In H. E. Rie (Ed.) Perspectives in Child Psychopathology. Chicago: Aldine-Atherton, 1971. 293-334.

Caldwell, B. M. "A timid giant grows bolder." Saturday Review, February 20, 1971. 47-49, 65-66.

Caldwell, Bettye M. "The rationale for early intervention." Exceptional Children, 1970, 36: 717-726.

Caldwell, Bettye M. "The usefulness of critical period hypothesis in the study of filiative behavior." Merrill-Palmer Quarterly, 1962, 8, 229-242.

Caldwell, B. M., Heider, J., and Kaplan, B. The inventory of home stimulation. Paper presented at the American Psychological Association Meeting. New York, New York. September 1966.

Chilman, C. S. Programs for disadvantaged parents: some major trends and related research. In B. M. Caldwell and H. Ricciati (Eds.) Review of Child Development Research, Vol. III. In Press, University of Chicago Press.

Cremin, L. A. The transformation of the school. New York: Alfred A. Knopf, 1961.

Goodlad, J. I., with Stoephasius, R., and Klein, M. F. The changing school curriculum. New York: Fund for the Advancement of Education, 1966.

Gordon, E. W., and Wilkerson, D. A. Compensatory education for the disadvantaged. New York: College Entrance Examination Board, 1966.

Hunt, J. McV. Intelligence and experience. New York: Ronald Press, 1961.

Hunt, J. McV. The psychological basis for using preschool enrichment as an antidote for cultural deprivation. Merrill-Palmer Quarterly, 1964, 10 209-248.

Karnes, M. B. Research and development program on preschool disadvantaged children. Final Report, Project No. 5-1181, Bureau of Research, Office of Education, U. S. Department of Health, Education, and Welfare, 1969.

Schaefer, R. J. The school as a center of inquiry. New York: Harper and Row, 1967.

Silberman, C. E. Crisis in the classroom. New York: Random House, 1970.

Wachs, T., Uzgiris, I., and Hunt, J. McV. Cognitive development in infants of different age levels and from different environmental backgrounds: an exploratory investigation. Merrill-Palmer Quarterly, 1971, 17, 283-317.

Westinghouse Learning Corporation/Ohio University. The impact of Head Start: an evaluation of the effects of Head Start on children's cognitive and affective development. June, 1969.

APPENDIX B

In Elardo, R. and Pagan, B. (Eds.), Perspectives on Infant Day Care. Southern Association on Children Under Six, 1972. (1070 Moss Avenue NE, Orangeburg, South Carolina 29115.)

Some Guiding Principles and Practical Suggestions for Infant Day Care Programs

Bettye M. Caldwell[1]

In a brief paper it would be impossible to describe even superficially the many kinds of teaching activities likely to be useful to persons who will work with the infants in a day care environment. Accordingly, in this report I shall concentrate on principles which should guide program development rather than on specific program activities themselves. To me it seems much easier to plan the individual activities if we understand the underlying principles than it does if we simply search in a random manner for activities likely to be helpful and appealing to young infants. In presenting some of these principles I will in effect be describing those which guide the operation of our program at the Center for Early Development and Education.

The Center Model

Our infant day care program does not follow a rigid curriculum. In fact, a major element of the philosophy which guides the program is that the atmosphere in the total environment is more important than any specific element of the curriculum. We see ourselves as trying to "design and create an environment," not as trying to "devise a curriculum." In this concern for creating a supportive environment we are involved with what has come to be designated as ecological issues. Thus we have come to describe our model as the ecological model of early development.

---

[1] Author's address: Center for Early Development and Education, College of Education, University of Arkansas, 814 Sherman Street, Little Rock, Arkansas 72202. The author's work is supported by Grant No. SF-500, Office of Child Development, Department of Health, Education, and Welfare.

The daily program for our children is derived by asking ourselves two fairly simple questions:

(1) What do parents, and what do we as staff members acting in behalf of parents, want infants to learn to do during the first three years of life? And, similarly, what do the babies themselves want to learn? Stated otherwise, what are the individually and socially approved objectives for children in this developmental period?

(2) What do we know about the ways in which the environment can influence development? This question requires some knowledge about how children learn and about environmental characteristics that are conducive to learning. If such characteristics can be identified, and if their counterparts which distort or stunt development can also be recognized, then the task for the adults who have the responsibility for developing and organizing programs is to create an environment containing as many of the former and as few of the latter as possible. Such an intense concern for identifying growth inducing environmental characteristics is in no way intended to minimize the importance of intrinsic developmental or maturational factors which also influence children's learning. We accept such characteristics as inherently given and consider one aspect of our ecological task to be the identification of environmental characteristics that will fit most adaptively into the individual's own intrinsic developmental schemas.

Over the years we have come to know a good deal about characteristics of the environment that help children learn. In the first place we know that children learn from adults who "teach" them. But we also know that they learn from self-initiated interaction with materials and from stimulation that comes inadvertently without the planned intervention of anyone (as when they fall out of a swing, or when another child pushes them down, or when a fire engine rushes down the street with its sirens at full volume). Thus the task for the program planners is broader than that of merely talking about how to "teach"; rather it consists of asking how we can more efficiently arrange the learning environment so as to facilitate the acquisition of culturally approved patterns of behavior. Part of this involves programming the adults' own behavior in such a way as to strengthen responses we want to encourage and to weaken those we want to discourage. In terms used by learning theorists, this refers to reinforcement or non-reinforcement of behavior. It also means having the adults realize that reinforcement may be physical (as in offering a hug or a piece of candy) or social (as in smiling at or praising a child who has done something praiseworthy). When an adult uses or withholds reinforcers, he or she is clearly trying to influence the behavior of the child. Therefore a good term to apply to any behavior which the caregiver may use to try to encourage or discourage behavior is 'influence technique'. Influence techniques are in many ways the most important component of the classroom ecology in that they subsume all other aspects. That is, selection of educational materials and arrangement of the physical-spatial environment do not just "happen." Rather these selections represent important choices made by the people in the environment who have responsibility for the child's current well-being and for guiding his future growth. Thus the behavior of the people who plan and implement programs can be viewed as part of the total ecological system.

Two of the major aspects of our model -- developmental objectives and classroom ecology -- will next be discussed more fully.

Developmental Objectives

In collaboration with parents, and after a review of the literature in the field of child development, we have formulated for our children a minimal set of objectives which cover the full range of behaviors which will hopefully appear in time in a child's behavioral repetoire. There are many ways to classify these objectives, but they fall roughly into the following areas: Personal-social development, cognitive development, including such functions as language, perception, and problem-solving, motor development, (fine and gross) and independence and self-help in carrying out routine behaviors.

The objectives which guide our program vary greatly in breadth and specificity. For example, there is a world of difference between an objective that reads, "Accepts, enjoys, loves teacher," and one that says "Can point correctly when asked to show his eyes." Attainment of the first objective would be expected to reveal itself in many ways both subtle and direct, and two persons asked to make a judgment as to whether a child has actually achieved the objective might not completely agree with one another. The other one, however, is sharp and clearcut, and, if a teacher or other observer did not already know whether the child had achieved this one, he or she could prove it for himself in an instant by asking a simple question. Note that the second objective does not say, "Knows where his eyes are." The latter wording can easily draw us into a trap when a child, in response to the request, turns and walks away or perhaps shakes his head negatively. Does he really know where his eyes are but simply does not want to tell us? Or does he know? As toddlers often acquire more than a modest amount of negativism about the same time they acquire rudiments of language, we have tried to predicate successful achievement of most objectives in terms of some clear behavioral outcome (pointing, saying, walking toward, arranging, etc.) rather than on our having to make a judgment about whether an internal cognitive change (knowing, understanding) has occured.

We have formulated over 150 objectives for the infants and toddlers in our program. This list is contained in the Appendix. The list is loosely sequenced in terms of increasing difficulty level within areas, however no claim is made for the exact accuracy of the placement of an objective in the series. Twice each year the children are rated by their caregivers on these objectives, and areas of strength and weakness in their developmental patterns are noted. These appraisals are then used to guide program activities for each child. The strategy behind this kind of program design is based on the premise that anything which helps the staff individualize program planning for different children will be to both the teachers' and the children's advantage. It also permits the selection of activities that capitalize on areas of strength for each child. And particularly, it helps us to note areas in which the child might be especially vulnerable or in which his major needs are not being met at all. Thus if we find a child who can successfully replace all the pieces in a three-hole formboard but has never been judged as having achieved the objective that reads, "Seems to 'feel good' about himself," then we have a signal that perhaps our entire program emphasis needs to be shifted in the direction of helping this child to enjoy his daily experiences and the people with whom he interacts.

Classroom Ecology

A day care center, linked with the home from which its children have come, comprises an ecological system which in its entirety will influence the development of young children. This environment may be described as having three major components: social, physical-spatial, and organizational. The social components refer to the interactions between the adult caregivers and the children, between caregivers and parents, among caregivers, and among children. The physical-spatial components include the indoor and outdoor physical space in which activities are conducted, the equipment and materials used by the adults and the children, and the arrangement of these materials in the living environment. Organizational components refer to the way it is all put together - to planned or accidental time sequences in the introduction or availability of social and physical-spatial components of the environment -- i.e., to the pattern and schedule of daily experiences. Planners of day care programs need to be aware of these components and of ways in which they can use them for the benefit of children and for the enjoyment of the adults who work in the program. These are the things we have at our disposal that can help us achieve our objectives for children -- our own behaviors, our personalities, a wide range of influence techniques, the almost infinite variety of interesting teaching materials, the building and grounds where we operate programs, and the freedom with which we can pattern the timing and arrangement of events and objects and people so as to maximize interest and minimize fatigue and monotony. In program planning, one needsto keep all these components of the ecological system in mind; none can be omitted if the resulting environment is to be maximally growth-inducing. This is a partial explanation of the comment made earlier than one should not restrict one's aims to "devising a curriculum." The total environment in which development occurs must receive our attention. Let us examine further these three components of classroom ecology.

Social ecology. Although one cannot at this juncture specify every feature of developmental environments which would be conducive to optimal growth for children, we feel that a great deal is known and can be provided. In terms of social ecology, there is ample evidence for the necessity of having infants cared for by a relatively small number of people and of maintaining an adult-child ratio of about one adult to every four or five children for the parts of the day when children require a great deal of attention. The behavior of the caregiver should communicate to the child that he is a person of worth and thereby help him come to view himself in this way; the adult must demonstrate to the child that they and the total environment can be trusted, thus helping each child develop a sense of trust in the adults who provide care for him in his world. The social environment must be sensitive to the needs of the child and must try to provide an optimal level of gratification -- enough to avoid emotional frustration for the child but not so much as to inhibit steps toward higher levels of competence and self-initiated behavior.

Responses made by the adults through all modalities (physical contact, emotional behavior such as a smile or frown, verbal comm[illegible]ts offering praise or information) must be appropriate for the child's developmental level. We operate on the assumption that the younger the child, the greater his needs for physical contacts with his caregivers. In such responses adults should cue children about the kinds of behavior which are valued by the society in which they are developing and should reinforce those behaviors when they occur. In their modeling for and guidance of the child's development, caregivers should apply as few restrictions as possible, on the child's own attempts to explore and apprehend his world. However, adults should not shun their responsibility to arrange experiences for children that will increase the likelihood of new learning which will offer more opportunity to feel competent and fulfilled.

One of the most important aspects of the social ecology of the day care environment to which we are committed is the use of influence techniques which are largely positive and which minimize punishment and force in trying to modify the child's behavior. Caregivers should be trained to give their attention to the child who is behaving acceptably or commendably and to withdraw attention as much as possible from the misbehaving child. We recognize that in group settings it is sometimes necessary to intervene immediately in order to prevent an infant from hurting himself or another child or adult. However, caregivers need to be aware at all times of the potency of their own behavior as models for the behavior of the child entrusted to them. The environmental strategy is thus to try, by careful organization of the total learning environment, to maximize the likelihood that approved behaviors will be emitted and to minimize the likelihood that undesired behaviors will occur.

Physical-spatial features. A great deal of attention is currently being given to improving our understanding of the types of physical-spatial environment which will be conducive to the optimal development of young children. We know first of all that the physical environment must be safe and healthful, that it must not contain hazards that immature minds will not recognize and avoid or an undue concentration of sources of infections and other diseases. Unless the environment gurantees such conditions, no other aspect of the program will be successful. We know also that the environment should not be too crowded, that both children and adults should have enough space to move around freely. In both animals and humans, chronic crowding is associated with increased aggression. Furthermore, the arrangement of the space that is available and the manner in which objects are anchored in the space will affect the behavior of young children. For example, a piece of equipment (like a sand box or water table) which can accommodate as many as eight children will, if it is placed where the children cannot freely move up to it and around it, elicit quarrels and aggression rather than sharing and cooperation. As important as the way space is arranged is the extent and variety of materials available for the children. Development of children is fostered by the provision of varied and patterned stimuli which have sensory appeal, are enjoyable and provide an opportunity for children to act upon the materials and receive feedback information from them. The available sensory stimulation must, however, remain within an intensity range that does not overload the child's capacity to receive, classify, and respond.

Temporal organization. The final ecological aspect which we recognize -- the organization of events into a schedule that is comfortable and enjoyable -- is in many ways the most challenging task for the program planner. For it is this aspect of program design that will strongly influence whether the children are happy and involved or fatigued, irritable, bored, or withdrawn. Many people write about day care from the standpoint of early childhood education -- from the experience of having children in groups two or three hours a day. The long day -- the eight or nine-hour day -- is quite another matter. We feel that the day must be organized so as to provide cycles of intense activity and rest, of staff-initiated activities and child-selected activities, of large group activities and solitary or small group activities. This type of scheduling must, furthermore, be based on each individual child's schedule rather than on some hypothetical group average. This is not to suggest that the day's activities should be so rigidly programmed that there is no give or stretch in the schedule, no opportunity for following the unexpected show of interest in a particular typeof play activity, no room for spontaneous expressions of desire. Obviously we are referring to broad planning done with the chil[illegible]ttention span and interest level in mind. Children begin to develop a sense of time at a very early age. They need a certain degree of predictability and regularity in their daily schedule to enable them to anticipate that their expectations will be confirmed.

In the organization of the day, program planners should seek to provide the children with rich and varied cultural experiences that are meaningful in the children's families, and also experiences which will begin to introduce them to the broader culture of which we eventually become members. In this gradual broadening of the child's world, the well-organized day care program will ensure the proper match between what the child has already experienced and assimilated and the new experiences to which he is being introduced. Ideally each new experience should entice the child to stretch and grow just a little bit, but it should not be so far ahead of his current developmental level that it cannot be assimilated into his existing level of cognitive, social, and emotional organization.

Putting It All Together

Integrating these concepts into a daily operational program is not difficult. We feel that a grasp of the principles is essential to successful performance as a caregiver; it is easier to improvise a teaching activity than it is a rationale. In this final section we would like to offer some practical suggestions to implementing such a model.

The Physical Setting

As explained previously, the infant care program that we are describing is part of a special extended day school. The building which houses the infants, however, is slightly removed from the remainder of the school building. It is located in a portable 24 by 40 foot classroom colloquially called "Baby House". The interior contains two separate bedrooms 9' X 10' and a separate bathroom. In addition we have reserved an area of 4' X 6' for a visitor observation area. A sketch of the building is shown as Figure 1. The entire building is carpeted, heated, and air conditioned. The purchase price of the building in 1970 was approximately $12,000. The building is by no means perfect for our needs; most especially we need one additional room. But groups needing a place in which to start a program should be aware of the possibilities inherent in such a prefabricated building.

INSERT FIGURE 1 ABOUT HERE

Our building has 960 square feet of living space. On the basis of an average daily attendance of 16 children, this gives us 60 square feet per child. When we add in the four adults who are always in the building, this cuts it down to 48 feet per person. We are almost afraid to compute our available space after subtracting for permanent pieces of furniture like couches and sand tables. By any criterion, however, we are crowded. The only thing that saves us is that our children are not limited in their day care experience to what goes on within the Baby House. That is, the facilities of the entire school are available to them from time to time.

Children and Staff

Enrolled in our infant program are 18 children[1] from homes representing a wide range of parental education and social status. Of the 18, six are babies and two are toddlers whose age range at time of enrollment was six months to two years. Although we like having a wide age spread together, and although most of the time it works well, this arrangement (within the limits of our physical space) occasionally causes problems, especially at nap time. We almost never have more than 15-16 children in attendance on a given day. On the basis of what we knew about attendance patterns, we deliberately "over-enrolled" in order to avoid having the facility under-utilized.

These children are regularly cared for by four adults; a lead teacher or nurse, a co-teacher, and two teaching assistants. This establishes an adult-child ratio of 1:4, and we find we cannot manage with fewer adults. In addition to these regularly assigned staff members, a young man works with the children two hours daily during the prime cognitive teaching time from 9:00 to 11:00 a.m. All the participating staff received extensive pre-service training, and all are involved in continuing in-service training sessions.

Our health program is supervised by a nurse who is full-time in the school and who checks on the babies daily. In addition she makes certain that safety and health practices are consistently followed. Nutritional supervision comes from the dietitian for the public schools. Diets for the youngest children, a few of whom were on formula when they first came into the program, are worked out in consultation with the children's parents.

---

[1] Since this was written we have increased our infant-toddler population to 36 by making available one classroom located inside the main school.

The family service personnel of the Center staff provide a link between the home and the Center. Most of the children remain in the Center all day, but we try to remain alert to changes in the parental work schedule and encourage part-day enrollment whenever this is feasible. Transportation is provided by the staff for a few families, but in most instances the parents transport their children to and from the Center. The day care service is available on the same basis as the elementary school is to the older children. That is, if the family lives in the area identified as within the geographic attendance zone for Kramer School (the elementary school which houses the Center), the children in that family are eligible for day care. The only fee charged for the service is the cost of lunch and snacks, and even this is waived if the family cannot afford to pay.

The Daily Program

Although no attempt is made to schedule the day too tightly, and although there will be some variation from day to day, most days look roughly like this:

8:00 a.m. Early arrivals taken to Baby House. (Children who arrive before 8:00 a.m. go first to one of the preschool classrooms in the school where early morning day care is provided for children of all ages. Thus during this time there is wide multi-age grouping.) Records are played, and toys made available that require a minimum of supervision. This is essentially a period for friendly interchanges between staff and children and staff and parents who bring the children.

9.00 a.m. Snack time. (Some early arrivals will have been given a full breakfast prior to this.) The toddlers sit at small tables, the older babies in feeding tables, and the tiniest ones are held. Sometimes a story is read during snack, but the usual input is friendly conversation -- talk about the weather, the clothes the children or adults have on, something that is going to happen during the day, etc.

9:15 a.m. Special learning time. This is the prime time for teacher-initiated activities with the older children who usually work in groups of 2 or 3 with one teacher. Special activities with the youngest babies are much more on a "catch as catch can" basis.

10:15 a.m. Outdoors in good weather. Free play, with encouragement of gross motor activities inside Baby House, or in indoor gymnasium in the school in the event of rain.

11:00 a.m. Preparation for lunch. Wash, change and "cuddle" babies. Younger babies go down for naps around 11:00 (this changes during the year as the babies become more mature).

11:15 a.m. Lunch. Again, conversation is the main teaching technique, and self-help for the children is the main behavioral objective.

11:45 a.m. Children are toileted and washed, with those capable of doing so taking as much responsibility as possible. Children who are in the program only during the morning are dressed to go home. Cots are distributed and naps begin as the children are ready. Most children are on their cots by 12:30 - 12:45.

1:00 p.m. Younger babies begin to wake up and are changed, washed, and loved individually. In good weather they may be taken for a walk in the strollers. Staff members have planning and training sessions during this period.

2:00-2:30 p.m. Toddlers wake up from naps one by one, go to bathroom, help get ready for snacks. Atmosphere is toned down, subdued until all children are fully awake; activities are quiet and individualized. Most are fully awake by 2:30, although a few sleep longer.

2:30 p.m. Snack, story, conversation.

3:00 p.m. Preparation for dismissal for those who leave when school is out at 3:15.

3:15 p.m. The last period of the day involves outdoor play and free play indoors plus one-to-one teaching activities; there are only 6 children in the Center at this time. During this period the major goal is to reinforce the morning activities and to keep the babies happy. It is easy to over-stimulate them at this time of day.

5:00 p.m. Baby House closes for the day.

Achieving the Objectives

It will be recalled that we have classified our objectives as falling into the categories of social, cognitive, motor, and routine behaviors. In order to achieve most of the social and routine behavioral objectives, no special programming is necessary. That is, the training of the caregivers is oriented toward helping them to understand how they can manipulate the social, physical, and temporal aspects of the learning environment in order to facilitate the infants' development. To some extent this is also true for most of our motor objectives. That is, the kinds of equipment we place in our day care center will to a great extent specify the types of motor learning we expect from the children -- a slide in the classroom or on the playground lets it be known that we want the children to learn to slide down it. And, as the normal young child is so much in motion, we can be certain that he will use whatever we put into our environment to encourage gross motor activities -- small climbing frames, tricycles, slides, up and down steps, swings, etc. We try to supplement the opportunities provided by the equipment in a number of ways, however. One such supplementation is verbal -- "My, you're up high"; "Your car goes fast, doesn't it." Another is frequent improvisation using packing boxes and regular classroom equipment, such as making an obstacle course with something to go through, around, over, under, etc., drawing circles or other shapes on the floor with chalk and having the children crawl or march around them. Then, of course, we help the little ones learn games that involve gross motor coordination (plus language, plus learning to share, and many other desirable behavioral by-products). These are so well-known (Ring around the Rosy, London Bridge, etc.) as to require no elaboration here.

It is in the achievement of the cognitive objectives that we come closest to describing what is generally referred to as "the curriculum." We do not consider our curriculum ever finished and are constantly trying to devise new teaching techniques appropriate for this age group.

SUMMARY

This paper has presented the outline of the model for infant day care followed at the Center for Early Development and Education. The objectives of the program and the ecological factors which guide its operation (social, physical-spatial, and organizational) were presented. Finally, practical aspects of program operation were described.

BABY HOUSE

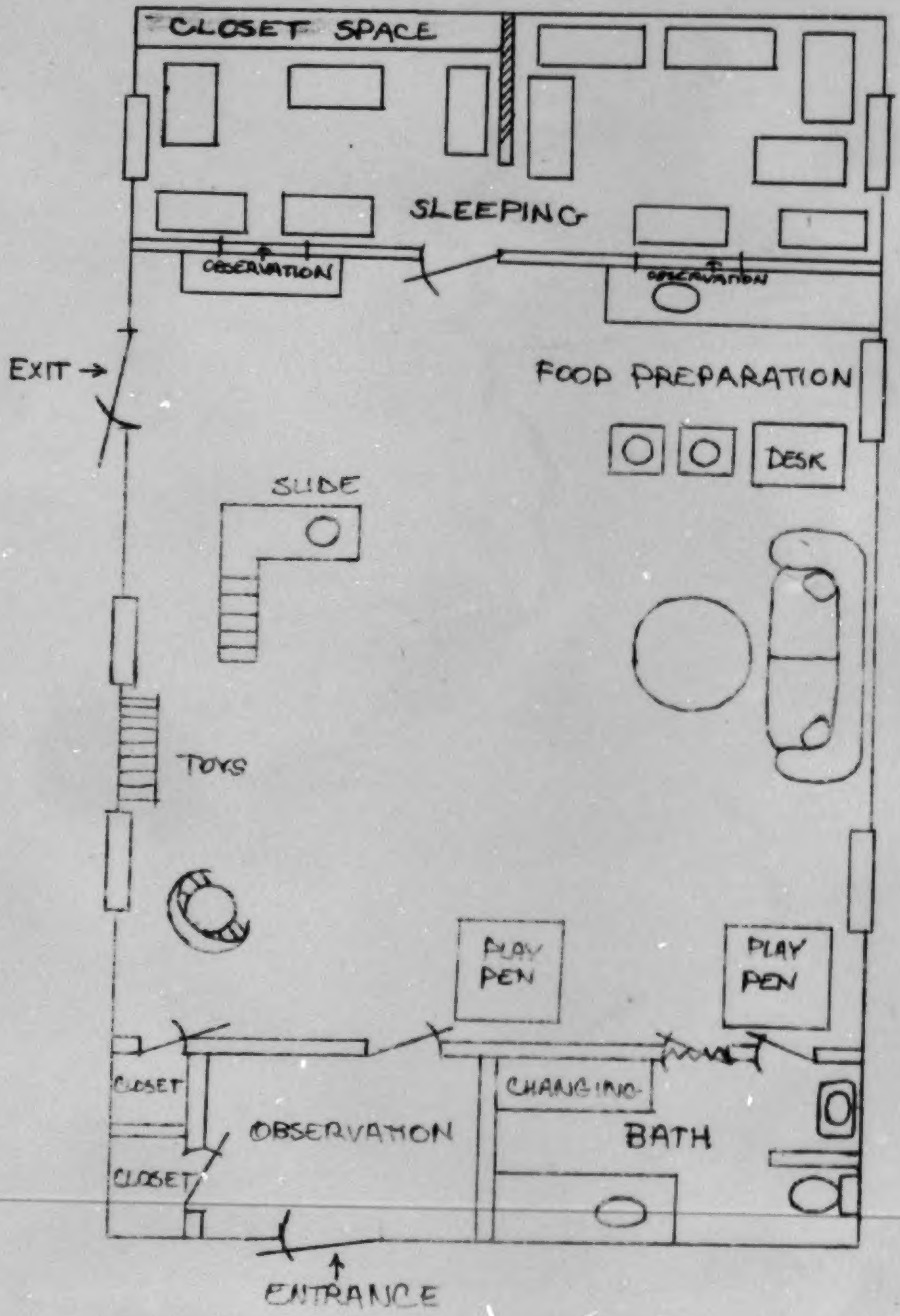

CLOSET SPACE
SLEEPING
OBSERVATION
OBSERVATION
EXIT
FOOD PREPARATION
DESK
SLIDE
TOYS
PLAY PEN
PLAY PEN
CLOSET
CHANGING
OBSERVATION
BATH
CLOSET
ENTRANCE

FIGURE 1

APPENDIX C

Sacus Pamphlet

APPENDIX D

DAY CARE: TIMID INSTRUMENT OF BOLD SOCIAL POLICY

Bettye M. Caldwell[1]

Abstract

The term "day care" has undergone significant conceptual revisions during the past ten years. Earlier restrictions on the service as one which differs from education and offers primarily care and protection have been removed. It is now recognized by parents and professionals alike as a developmental service par excellence for children and families. Those who represent the field must accept the responsibility for influencing policy that should reside in such a potentially powerful social institution.

---

[1] Author's address: Center for Early Development and Education, College of Education, University of Arkansas, 814 Sherman Street, Little Rock, Arkansas 72202. The author's work is supported by Grant No. SF-500, Children's Bureau, Department of Health, Education, and Welfare.

In Press, Saturday Review, February 20, 1971.

DAY CARE: TIMID INSTRUMENT OF BOLD SOCIAL POLICY

Bettye M. Caldwell

In recent months "day care" -- an awkward and somewhat insulting term which few people used in either their professional or personal vocabularies as recently as five years ago -- has become a household term. Widely heralded by its advocates as a near panacea for many public ills, demanded by women as a civil right, offered as an employment lure by companies hiring large numbers of women, requested by city planners and boards of anti-poverty organizations, and recommended as an essential first step in reducing the large numbers of persons receiving welfare -- how could the field have more status? But this pleasureable situation is very new.

Day Care, the Poor Relation

Until recently, day care was but a poor relation of both social service and education. Neither field seemed disposed to embrace it fully or recognize its legitimacy. But, historically speaking, day care has been much closer to the field of social welfare than to education. In fact, it is from the field of social service (child welfare, in particular) that day care received its definition; yet ironically the conceptual definition offered by the child welfare field may have served to restrict the sphere of influence of the day care movement. This restriction operated in at least two areas: the designation of the major function of day care as care and protection and the implication that the chief recipients of service should be children from families with some type of social pathology.

Care and Protection

Early literature on day care generally took special pains to differentiate day care from education. For example, in the 1960 edition of the Child Welfare League of America Standards for Day Care Service (the vade mecum for all workers in the field) one finds the day care field delimited as follows:

"Day care service has to be differentiated from the nursery school or kindergarten, and from extended school services and other programs for school-age dren offered as part of elementary school systems. These have *education* of ng children as their main purpose. The primary purpose of a day care service ne *care and protection* of children. This purpose, the reasons for which a d and family may need it, and the responsibility shared with parents, distin- sh a day care service from education programs."

No challenge to the importance of care and protection is intended here. But meaning of care and protection is derived from the time and place in which the d to be cared for happens to live; then constancy of meaning should not be ected. At the time the day care movement gained adherents and momentum merica, the types of hazards from which we wanted to protect young children e things like inadequate supervision, insufficient food, lack of shelter, and sical abuse. As today's knowledge about the importance of experience for early elopment was only faintly limned in our consciousness at the time the above nition was formulated, it is not surprising that the prevailing concept of quality care would fail to recognize education as an integral part of "care and protec- ." Now we have a clearer recognition of the necessity of also protecting children n toxic, inadequate, or inappropriate early experiences -- i.e., of recognizing cation as a necessary component of care and protection.

Day Care Clientele

A second factor which undoubtedly kept the day care field slightly outside the nds of general respectability was the designation of the family with problems he primary group for whom the service was appropriate. To quote once again n the Child Welfare League's influential *Standards*:

> "Day care, as a child welfare service, is an expression of the community's cern for the welfare and protection of *children whose parents need help* in viding the care, protection and experiences essential for their healthy deve- nent."

The pamphlet goes on to identify such children as those whose mothers work, se fathers might not be in the home, who have illness or emotional problems, who live in poor housing conditions. This tendency to associate use of day care with family pathology has been aptly labeled the "residual" approach by Florence Ruderman. Certainly if families must see themselves as exemplifying social athology in order to use day care services, the field is not likely to be embraced y those who could give it status in the larger society.

Day Care, the Parvenu

Suddenly day care is "in," and quite naturally the groups that once neglected t now claim it as their own. Money that cannot be obtained for "early childhood ducation" may possibly be found for day care. Fundamental child welfare programs that cannot be launched independently can possibly be made available as iders on day care appropriations. And the current popularity is characterized y a healthy program diversity. There is certainly no one model for day care which s pushed as the model today. Still the biggest suppliers of day care are family members (other than the mother). Next in line come those informal arrangements worked out between consumer (parent and child) and entrepreneur (identified colloquially by the disparaging term, babysitter). Fairly far down the list of potential uppliers of the service are the organized programs generally called day care enters. It is these programs which come under the provisions of licensing laws nd which receive the highest degree of surveillance. Such centers may be supported hrough state or federal monies provided for service, operated as demonstration and esearch centers, supported and controlled by the parents of the children in attendance, ffered as a public service by a church or secular community organization, provided s an employment lure by industry, run for profit by a private operator or as a ranchise unit of a national organization -- and on and on. Still relatively scarce re programs such as the one directed by the author and which involve a complete lending of day care with education -- i.e., extending the age of admission downward to the first year of life and extending the school day both directions to accommodate work schedules of parents.

How do we explain the sudden popularity? I would suggest that it can be ccounted for by both pragmatic and conceptual considerations.

Pragmatic Explanations

Day care and maternal employment. One reason that the number of day care enters did not substantially increase for many years was the implicit fear that, f more such facilities were available, more mothers would be tempted to work utside the home. Yet more mothers *have* gone to work outside the home, including nothers with children younger than six. And these are generally conscientious nothers who want good child care during their working hours. Although relatives nd neighbors still constitute by far the most frequently used child care resources, nore and more women have learned about day care, especially educational day are, and have come to request or demand such facilities for their own children. Furthermore, whereas national social policy formerly endorsed financial subsidies o permit mothers with young children to remain at home and care for their children the Aid to Families with Dependent Children program), this policy is currently eing re-examined. That is, training and employment of the mothers are being rged as a more adaptive alternative, with quality day care recognized as essential f the policy is to avoid being self-defeating from the outset.

Interest in day care as a means of facilitating employment is not limited to otentially employable mothers and government policy makers. Employers are lso turning to day care programs as a possible way of enticing female workers nto employment and as a way of reducing absenteeism from the job. The best nown modern program exemplifying this interest is the day care program operated n conjunction with the KLH factory in Cambridge, Massachusetts. Similar programs vere funded under the Lanham Act during World War II, only to be discontinued at he end of the war when returning veterans dramatically changed the employment icture and displaced large numbers of women from their jobs.

Day care and Women's Liberation. A second pragmatic consideration that as helped enhance the status of day care is the rapid dissemination of the ideas nd feelings of the more vocal advocates of civil and personal rights for women. t has taken this group to strip day care of its "residual" social pathology orientaion. Stressing that personal fulfillment is a right to be shared by men and women alike, and that child care is not the only valid avenue through wihch women may gain fulfillment, proponents of what is currently known colloquially as the "Women's Lib" movement have demanded quality day care as a means to that personal fulfillment. Such demands have not been delivered sotto voce, and with time they will crescendo to a much higher social decibel level.

At the recent meeting of the White House Conference on Children, a fairly large number of the delegates to Forum 17 (Developmental Day Care) represented various Women's Lib groups, and they were among the most vocal in their demands for the availability of child care around the clock throughout the year. Similarly, a representative of the group was sure to challenge any implication that, in increasing day care facilities to the level needed, priority be given to indigent and for minority groups. Such delegates were also vehement (as were many others) that plans for federally supported day care should be completely divorced from public assistance -- thus officially removing the taint of social pathology from day care services.

Conceptual Considerations

In spite of the importance of these pragmatic considerations, the most fundamental influence has undoubtedly been the steady flow of information about the importance of the first few years of life for normal development as a human being. That is, evidence has gradually accumulated that certain kinds of experiences during the early years are associated with behavior considered adaptive for the children and beneficial for society. Although the generation of available data is a short one indeed (about 5 years), the results have filtered out from scientific laboratories to popular magazines and thence to parents of all social classes. And the net result is that the parents are clamoring for more such programs for their children. And, as many of these same parents need child care, the request is generally for day care rather than "early education" per se.

Adaptive Conceptual Revisions

The professionals who give semantic shape to social trends have not been indifferent to these pragmatic and conceptual considerations. In 1969 the Child Welfare League's Standards were revised, and it is significant to note at least three major conceptual changes in their definition of day care and in their specification of eligibility for the service. A first has to do with the range of services legitimately offered as day care:

"At present, a wide range of resources and facilities, including informal arrangements and organized programs under various auspices, is used for the care of children outside of their homes during some part of the day. These resources and facilities have been established to serve many different purposes. They place differing emphases, reflected in their programs and the children whom they serve, on the responsibility for care, protection, child development, education, or treatment."

This new statement recognizes that care and protection involve an inherent developmental and educational component. Day care can no more be separated from education than it can from welfare or health. In breaking away from the earlier narrow concept which tried artificially to separate the two patterns of service, the day care movement in this current definition has now given itself a new charter. This is no small and insignificant conceptual change.

In a second radical departure from the earlier concept, the new Standards suggest that day care services may be offered more as a service to the mother than to the child. The pamphlet states:

"Day care programs are promoted and used for purposes in which the interests of the child may be a secondary consideration. Day care is provided to allow mothers, particularly those who are unmarried, to complete their schooling or to train for new careers; to help financially dependent mothers attain self-support and to reduce public assistance expenditures; and to recruit women for, and retain them in the labor force." The League is not an organization which which can lightly take the subordination of the needs of children, however, and the report goes on to caution:

"Under these circumstances, it is necessary to ensure that day care is in the best interests of the individual children, and that the daily experiences are of benefit to them, or at least not detrimental."

In a subsequent section of the new Standards, a third subtle but major conceptual shift is encountered. This relates to the verb that accompanies the "care and protection" charter. While the old Standards used a nominative statement ("The primary purpose . . . is the care and protection of children"), the new revision adds an important infinitive and prepositional phrase, viz., "The primary purpose of a day care service is to supplement (italics mine) the care and protection that the child receives from his parents (italics mine)." It is as though the field were more willing to share the responsibility at this time, or else more cognizant of the reality that care and protection for the young child attempted in loco parentis has little opportunity of providing much of either. The implication is that the family carries the major burden and the day care service only supplements the family's endeavors.

The Next Generation Versus the Now Generation

To this author these subtle changes have far-reaching implications to which careful attention needs to be given. They reflect a shift in orientation which is at once both honest and refreshing and yet just a little alarming. The new Standards have the audacity to suggest that day care is more than a noble service to the next generation, being in addition an important service and convenience for the now generation. The League is to be credited with recognizing the validity of that orientation. People do tend to get just a bit sugar-coated in talking about services for children. In my own vernacular I sometimes get over-extended about what day care will do for the children to whom it is available -- all the social, affective, and cognitive gains that will accrue as a result of the experience -- that I tend to forget about the families of the children. And often, when I have remembered them, it has been in terms of concern with modifying their behavior in order to facilitate our goals for their children.

A day care program can effectively serve both generations, but in my experience professionals tend to be much more comfortable in conceptualizing their endeavor as being primarily for the benefit of the next generation. Were it otherwise, many of our daily routines would be modified. For one thing, we would eliminate once and for all the awkward term "day" care and call our programs "child care." We would not have rigid hours but would perhaps be open 24 hours a day and on weekends (as the Women's Lib groups are demanding). We would be more patient with a mother who is late to deliver or pick up her child. And we would be more cooperative and less shocked when a mother with ideas about child rearing that are widely divergent from our own gives us a bit of friendly advice or issues an ultimatum -- "If he wets his pants again I want you to swat him good." Did there ever exist a day care professional who, upon receipt of such an order, did not feel compelled to "work with" the mother to help her understand our gentle techniques of discipline, inform her that we had other ways of dealing with such behavior, that wet pants did not really bother us, etc.?

One of the reasons many persons have resisted day care on a large scale has been the fear that, no matter which generation it focused on, it would weaken the tie between generations. Nowhere was this fear more apparent than in the recent White House Conference. While one of the major themes, strongly influenced by Bronfenbrenner, was to "bring families back into the lives of children and children back into the lives of families," the resolution which received the largest number of votes from the delegates was one which called for "Comprehensive family-oriented child development programs including health services, day care and early childhood education." Perhaps the very designation of day care as a "family-oriented child development" program helped convince the delegates that day care need not drive a wedge between parents and children (to use again a Bronfenbrenner expression). But the fear was always there, more evident by far in the professionals than in the parents.

The fear that day care will weaken the bond between children and their families has been more presumptive than factual and has been built upon an irrational equation of day care with institutional care. Dare care -- daily separation followed by nightly reunion in the context of social relationships that permit a sense of identity to be formed -- appears to have none of the socially toxic effects of prolonged institutional care, or even of temporary separations (such as hospitalization) during which family contacts might be terminated for a given time. The author and her Syracuse colleagues, Charlene Wright, Alice Honig, and Jordan Tannenbaum, recently published data that demonstrated rather persuasively that two-and-a-half year old children who had been in day care since around one year of age were as attached to their own mothers as were comparable control children who had never had such a day care experience.

Whatever the source of the fear, it appears to be a strong one. And some of the parent groups that are advocating more day care facilities are also reminding the professionals that they, the parents, have a right to share in the planning and decision-making. During the summer of 1970, a workshop was held in Airlie House, Virginia, in order to prepare a number of pamphlets which could be used as guides by inexperienced groups wishing to initiate and operate day care programs. A set of principles which would cover day care for children of all ages was prepared as the most important document of the workshop, and these principles went considerably beyond the League's position in recognizing that day care could sometimes be structured to meet the needs of the parents. Although the document is not at this time in its final version and thus cannot be quoted, it can be paraphrased. The early draft proposed that the primary focus of any day care program should be the individual child and his family -- not the child alone or the parents alone. Furthermore, day care was described as being a type of program which could either bring parents and children together or else drive a wedge between them. The statement of principles opted strongly for adoption of the former goal and stressed that quality day care should never do anything to reduce the family's commitment and responsibility for its own children. One suggested way of achieving this inter-generational cohesiveness was to supply parents with the information needed to make informed judgments and then to have them participate fully in decisions about what would be desirable for their children in day care as well as in the home.

To summarize this section, it is as though day care has been viewed, in today's parlance, as an advocate for the child, for the parent (especially the mother), and now for the family. The policy implications of these different orientations are profound and far-reaching.

Day Care and Social Policy

The arguments in this paper have been directed toward the generalization that (because of its importance in the lives of children) day care should be a bold instrument of social policy. In fact, day care has not made policy; it has followed along when policy has been made. It has accommodated when it should have forced accommodation from other institutions. It has apologized when it should have boasted of its potential. It has grown somewhat haphazardly, changing its own definition every ten years or so. At present it does not know whether it should serve the child, the parent, or the family. It cannot make up its mind whether it is a service for families with social pathology or for all families, whether it should be limited to children from economically underprivileged families or be offered to all children, whether it wants to change children or preserve cultural styles from one generation to the next. It does not know where to obtain its official identity. This identity confusion can be clearly seen in licensing patterns followed in the 48 states which now license day care facilities. In the licensing for group day care for pre-school children (not infants) the Welfare Department (or the equivalent thereof called by a slightly different name) handles the licensing in 36 states, the Health Department in 5, and some different agency or some combination in the remainder. The Department of Education is the licensing body in only one state, although it shares the task with Welfare in one other and makes recommendations in many of the states. And every ten years or so it shuffles around looking for the proper directions for its continued evolution. Perhaps, as a hybrid, it will not "breed true" from one generation to the next without planned pollination.

It is precisely in this area of planning for our children, except in the grossest sense, that we are most timid in this country. With our tradition of valuing rugged individualism, we have been reluctant to say much about the kinds of children we want. Do we want obedient children? Happy children? Adaptive children? Children who remain faithful to the values of their families? Militant children? Bright children? Group-oriented children? Woodstock and Maypole youth or Peace Corp youth? Eventual adults who can slip from one type to another? Bronfenbrenner has commented on the extent to which child-rearing patterns in the U.S.S.R. have a clear objective -- to train children to become responsible citizens of the Soviet state -- in contrast to the belief in autonomy in the U.S.A. In our concern for respecting individuality we occasionally find license for evasion of the responsibility for guidance. Day care, as but one of the resouces in an armamentarium of child care programs, suffers no more from ambivalence on this score than does any other type of child training institution, but it does suffer.

The Need for a Forum

Actually, all the day care field needs in order to be a powerful instrument of social policy is a forum from which to advertise its potential and a willingness to proclaim its importance. To this author that forum cannot logically be any place other than public education -- albeit education defined more flexibly and comprehensively than is usually the case. Were a health definition to supersede the current welfare concept of day care, the program implications would be just as semantically constraining. That is, to transfer concern from care and protection to health and safety will still not guarantee that the child's developmental needs will be met. Actually there is little justification for a conceptual separation between public education and public day care, for most schools are "day schools" and represent "day education" with or without the supportive family services generally offered under the rubric of day care. Day care and education (as now defined) differ significantly, however, in the timing of their pattern of influence, with day care generally entering the lives of children at an earlier age. And, in the near future, as infant day care becomes more respectable, the age of entry will become even lower. Any experience that enters the lives of children at a time when they are impressionable, when basic patterns of expressing, thinking, feeling, and problem solving are being developed and value systems are being assimilated, has no need to feel apologetic.

Coming from this author the suggestion that day care find a forum in education (even taken in its literal meaning "to lead out of") can only sound like a partisan recommendation. It is hoped that this will not be the case, for I am talking more about a conceptual model for program design than about professional auspices for program operation. But essentially the same suggestion has been made by others, including Florence Ruderman in her book, Child Care and Working Mothers:

"Day care, regardless of the auspices under which it is offered, should be developed as a child care program: a program directed to optimum social and psychological health of the young child whose mother cannot care for him for some part of the day. . . But a given family's need for social casework or other forms of help should no more define day care, nor determine eligibility for it, than the existence of social service departments in schools and hospitals now defines these facilities as social work services. For organized child care service in this country to develop and meet adequately a growing social need, it must be recognized as a positive social institution and enabled to stand in its own right as an essential child care program." With this orientation, the challenge becomes one of having comprehensive child care embraced as a legitimate endeavor of that behemoth of public policy -- public education -- without having it consumed in the fire of an encrusted bureaucracy and without any loss of concern with "care and protection." And this orientation need not close out any of the diverse models now being tried. Public education would do well to stop and reflect occasionally that one of its concerns should be with the care and protection of the children and youth who come within its sphere of influence! From such a powerful forum, day care would be heard. And perhaps education would listen.

Summary

This paper could just as well have been entitled "Day Care: Bold Instrument of Timid Social Policy" as the reverse title I gave it. For at this moment in history, when we are on the threshold of embarking on a nation-wide program of social intervention offered through comprehensive child care we let ourselves be persuaded to prattle in small talk about such things as cost per child, physical facilities, or even community control. Bold instrument of timid policy. An when we begin to think big about what kinds of children we want to have in the next generation, about which human characteristics will stand them in good stead in a world changing so rapidly that we cannot begin to predict accurately what it will be like by the time they are adults, we fall back on generalities such as care and protection. Timid instrument of bold policy. Yet any social institution which can shape behavior, can help instill values and competencies and life styles, should also shape policy. Early child care is a powerful instrument for influencing patterns of development and the quality of life for children and adults. Because of its power, those who give it direction must not think or act with timidity.

APPENDIX E

Day care *(Continued from Page 5)*

preted negatively; such situations can be used to reestablish effective school-family communication.

TOWARD COOPTATION

I have tried to stimulate thinking about the advantages of a conceptual and operational integration of day care and education and also to encourage colleges and universities which prepare educational personnel to include day care in their endeavors.

However, having neglected day care for so long, education cannot simply step in and say, "I will take over now." The social welfare field, which has carried the ball, which has fought the battles in most of the state legislatures for minimum standards, program funding, and the like, will not and should not passively relinquish all its interests. The social welfare era of guiding day care has made a major contribution. It has helped humanize the service; it has insisted on serving the needs of both children and parents.

To a certain extent, the social work profession has helped keep day care "loose," keeping options open so that the directions of growth were not closed out before they had a chance to be tried. The entire field of education needs the kind of emphasis that the social welfare orientation has given to the day care movement.

As day care, so long the pariah, becomes the prodigy of education, the educational establishment must recognize and build upon—not around—the legacy of the social welfare field. It is in this context that education must contribute the best of its own traditions and expertise as day care burgeons into its rightful place alongside our major social institutions.

Bettye M. Caldwell is professor of elementary education and director of the Center for Early Development and Education in the College of Education, University of Arkansas, Little Rock. Dr. Caldwell is presently working on a book, Educational Child Care for Infants and Young Children.

Editor's Note—A bibliography on early childhood education has been prepared specially for teacher educators by the ERIC Clearinghouse on Teacher Education. Preparing School Personnel: Early Childhood Education *is available through the ERIC Document Reproduction Service, Post Office Drawer O, Bethesda, Md. 20014. The order number is* ED 043 581; *prices are 65 cents for microfiche and $3.29 for hardcopy. Payment must accompany orders of $10 or less.*

Nominations are in order

The 1971-72 AACTE Nominating Committee has been selected; institutional representatives interested in suggesting nominees for the next AACTE slate of officers should contact the committee now. Chairman is Paul H. Masoner, dean, School of Education, University of Pittsburgh, Pittsburgh, Pa.

APPENDIX F

This appendix consisted of a reprint of "What Does Research Teach Us About Day Care: For Children Under Three," by Bettye M. Caldwell. It is copyrighted and not available for reproduction by ERIC at this time. The paper was published in Children Today; January-February 1972, p6-11.

APPENDIX G

WHAT HAPPENS TO CHILDREN IN DAY CARE?

Bettye M. Caldwell[1]

A few years ago it would have been impossible to try to approximate an answer or series of answers to the question, "What happens to children in day care?" for the simple reason that for many years nobody bothered to try to find the answers. For day care in America has grown in spite of social planning rather than because of it. It is as though we tacitly assumed for many years that if we didn't pay any attention to it, it would simply go away. Strong forces of public opinion actively resisted the growth of day care, asserting that more available day care would mean that more mothers would go out of the home to seek additional employment, thereby neglecting their children and increasing juvenile delinquency and all sorts of other social ills. Finally social planners began to realize that failure to provide good day care did not keep mothers at home, particularly those thoughtless creatures, often left with full responsibility for child-rearing, whose children might not have subsisted without the income that the mother could provide. Rather the alternative to not providing good day care was to force mothers to settle for substandard day care.

But suddenly day care is very much in our consciousness. Where did it come from? With many people the experience is like learning a new word. Before you learned that word, you never heard it before; now suddenly you hear it three times a day and wonder why people are suddenly using it so often! Day care, or simply child care, as most of us prefer to call it, has suddenly emerged as a major force in American life, and it will not disappear again. It is with us to stay. I think there are a number of reasons for that emergence but do not wish to spend so much time sharing my analysis of social trends with you that I forget about the major questions raised by my title. Suffice it to say that at least one reason that community-based child care is with us as a subject of major social concern is that we have reached a new level of community orientation in our personal lives. One by one the major areas of life that have throughout history been taken care of predominantly within the family (except for a few select people within each social group)--child-bearing, routine health care, basic education, food preparation--have begun to be shared with others in the social group. Such sharing comes about in any field whenever specialization of function takes place and some members of the community are recognized as more skilled than others at a particular task. As techniques of child rearing have become a subject of scientific study, and as growth-inducing and growth-retarding practices have been identified, it has become inevitable that child care be gradually ever more professionalized. Whenever either self-proclaimed or consensually-acclaimed "experts" appear who supposedly can do a better job at a given task, someone is sure to speak up quickly and say, "Then do it for me, or at least help me do it." To me it is useful to view day care in this context of social evolution as a manifestation of the professionalization of child care and not simply as an ad hoc procedure created to perform desired social services.

---

[1] Department of Elementary Education, College of Education, University of Arkansas, Fayetteville, Arkansas. This paper was originally delivered as an S. and H. Foundation Lecture at Pacific Oaks College, Pasadena, California, February 9, 1972. The author's work is supported by Grant No. SF-500, Office of Child Development, Department of Health, Education, and Welfare. Author's address: 814 Sherman, Little Rock, Arkansas.

The dawn of the day care movement in America (it took a quantum step during and after World War II) did not coincide with our obtaining information that would help us answer the question of our title, "What happens to children in day care," for early day care programs grew up almost outside the boundary of planned scientific inquiry. Simultaneously with the increase in day care in America there occured a build-up in the area generally called nursery education or preschool education. But certainly the leaders in that field did not talk to the people in day care, and vice versa! Indeed not. For, after all, was not day care a service designed to provide care and protection for unfortunate children whose mothers were forced to work? And did not use of day care automatically identify a family as one in which there was social pathology? After all, if there were no such pathology, the family theoretically would not have sought day care. Nursery education, on the other hand, was for children from storybook America, for the Dick and Janes who would later appear in our readers, all blond and blue-eyed and fair-skinned, happily chasing their dog Spot in the grassy yard of their Cape Cod house surrounded by its white picket fence. All of these children had two parents who went to PTA meetings. The father had a steady job (preferably as a University professor), and the mother stayed at home and baked cookies and lovingly applied band-aids when someone fell down. These children were exhaustively researched to the extent that we knew how they grew, what their conceptions of causality and deity were, how many words they knew at each age level, whether they played parallell or as isolates (heaven forbid!), what their average IQ's were, whether they responded better to autocratic or democratic leadership--and on and on and on!

But there were other children out there. It was just, as Michael Harrington charged, that they were invisible to us. And many of them were in day care--often of an improvised type, not in beautiful lab schools furnished with Creative Playthings and futuristic jungle gyms. No, many of those of nursery school age were left with 6 or 7-year-olds at 5:30 in the morning when mother had to leave the housing project to catch a train across town to arrive by 7:00 A.M. at the hospital where she worked. At 7:30 they went to an aunt's apartment three floors down, and she gave them breakfast and then took them, along with her two, to a decrepit day care center, following which she left for work. At 4:00 their mother picked them up, along with the two that belonged to the aunt, and took them home with her, where all the children stayed until the aunt came home--and so on. Certainly few people were interested in the child development of "those children." For how could we possibly generalize to the population as a whole if we used such a group for our research sample? The fact that "those children" were probably far more representative than the ones being exhaustively studied never seemed to make an impression on anyone's consciousness until the early sixties.

But then things changed abruptly, and day care was given the impetus it needed to come into its own--into its own with full trappings of social respectability and that fraternity handshake of the intellectual crowd--data, facts, information. For it was in the early sixties that early childhood as an important developmental period was discovered. Furthermore, with early childhood's discovery came the notion that it was not only there but that it might be critical for setting developmental limits for the child for the rest of his life. Intervention during the early years became the battle cry, and for the first time the primary target group was "those children" who previously had been totally neglected. Scientific ideas can never flourish, of course, unless they are compatible with the Zeitgeist. More and better nursery education of the 2-3 hour a day variety would not have filled a major social need. But more and better day care would indeed fill such a need. And so day care came out of the kitchen and, for the first time, began to eat in the dining room. It was no longer a pariah; it was really the prodigal son who had been misunderstood all along. And so, for the last six or seven years, we have been seriously trying to observe day care programs, to try to evaluate the extent to which they formulate objectives for the children and families and then meet those objectives, to conduct research on samples of children in day care and thus to understand them better and to broaden our understanding of all children. And on the basis of the pool of knowledge now emerging we can begin to answer the question of this paper,"What happens to children in day care?"

1. A full range of experiences will be encountered by children in day care; one can no more speak of day care in the singular than one can of "school." This

has been documented more completely by Prescott and Jones (1967) than by anyone else. They observed for four 20-minute periods daily for 10 days in 50 randomly selected day care centers in the Los Angeles area and noted such things as teaching style (use of restriction or encouragement), amount of training, program formats, spatial arrangements, and staff attitudes. As would be expected if one paused to reflect on it, they found a wide variety on all their variables in the different centers they observed. Among their findings were such things as the fact that, in general, amount of training was a predictor of whether the program would be adult-centered or child-centered, with more training associated to a child-centered approach, although there were some very well-trained directors who were adult-centered. Size of the facility and arrangement of equipment within the available space was an important determinant of teacher performance. They found that day care was most effective (as determined by the extent of the children's interest and involvement in the program) in those centers in which the staff was flexible and where children's needs were met. Positive behavior tended to be forthcoming in response to encouragement, to lessons in consideration, creativity, pleasure, awe and wonder, and to emphasis on verbal skills. Negative behaviors tended to be associated with restriction and to lessons in control and restraint and rules of social living. In short, in this important observational study, it was possible to place the programs of different centers along a variety of continua both in terms of program input and child response. Neither in California nor in any other location can one refer to "day care" en masse and be doing anything other than obscuring important information.

2. Children in day care develop motivationally and in terms of skills considered adaptive in today's world. A few years ago when a number of people began to do serious research on the effects of day care, critics of the field took the position that the task for the researchers was to prove that the experience did not harm the children. This was generated by the fallacious assumption that group

day care was the equivalent of institutional group care, in which children experienced extremely depriving sensory circumstances and in which the problem of self-identity was difficult if not impossible to solve. Now we fortunately have an accumulation of data which demonstrates that quite the reverse can be true in well-planned and well-run programs. That is, children enrolled in day care on the average show significant gains on standard intelligence and achievement tests. Data in support of this can be cited from the Children's Center in Syracuse, New York (Caldwell and Richmond, 1964). The hypothesis that led to the development of that program was that the optimal time to begin enriching the experiential environment of a child was during early infancy--that is, after such time as he would have formed an attachment to his primary caregiver (his mother) but before such time as restrictive modes of communication and thinking had been established that would limit his future adaptivity. From 1966 to 1969 this program had yearly enrollment of approximately 75 children ranging in age from six months to five years and divided into five approximately equal subgroups. Age separations in the groups were not rigid, and during part of each day the children were in planned contacts with older and younger groups. Most of the children attended for a full six-to-nine hour day, with a teacher-pupil ratio being approximately 1:4 for all groups. The classroom activities offered a balance between teacher-initiated and child-initiated activities. That is, in each day's schedule there were some activities that were carefully planned by the teaching staff and others that involved completely free selection of activity and expression of interest by the children. All groups were racially balanced, and an attempt was made (not always successful) to have equal numbers of boys and girls in each group.

At this time data are available from some 86 children who had entered day care prior to age three and 22 who had entered after age three and 49 controls from comparable socioeconomic backgrounds (Caldwell, 1971). Each child used in the analysis had remained in the program for at least 6 months; many had remained for two to three years. Each child was assessed shortly after enrollment on a standardized test of early development and again immediately prior to this data analysis. The difference between the initial score and the subsequent score was statistically significant for both subgroups of children, with neither group gaining more than the other. For both the early and the late entries, the difference between the amount of change shown by the day care and the control children was substantial and statistically reliable. Data from other demonstration day care projects have shown essentially the same pattern.

It has been suggested that such gains are spurious and merely reflect greater familiarity with the test situation and greater ease and relaxation during the assessment period. This may well be the case. However, it is significant to note that in the Syracuse study controls were themselves tested in circumstances which corresponded very closely to those under which the day care children were tested. That is, we established a one-week "nursery school" for them, and no child was tested until he had achieved familiarity in the situation and with the examiners. But even if the gains in the day care children are motivational rather than intrinsic cognitive gains, this in itself is important. Whether such gains hold up with time is quite another matter, and one to which a great deal more research attention needs to be directed in the future.

Findings from other carefully evaluated day care programs have shown either similar gains (Robinson and Robinson, in press) or else no difference between day care and control children (Keister, 1970). Probably the most accurate generalization that can be drawn is that the greater the proportion of children in a program from environments which differ from the middle class norm, the greater the likelihood that results will indicate an increase in cognitive functioning associated with day care; the greater the proportion of children from backgrounds already geared to the acquisition of skills represented in the developmental tests, the less the likelihood that there will be a statistically significant difference between day care and control children. But above both of these conclusions can be placed the superordinate generalization that intellectual development need not be adversely affected by participation in day care as many people seemed to fear might be the case if children were separated from their families for large segments of the time during their early years.

3. Children in day care can be kept healthy. The question of the effects of day care on the health of children is a major one. Because of the associated health hazards, it would have been folly until just a few years ago to advocate bringing large numbers of young children, especially infants, together in groups--epidemics of measles or polio would have been disastrous consequences. Now, however, such illnesses can be controlled by immunization and, provided a family receives good medical care, they no longer need to pose a serious threat to the presence of young children in groups.

But what about the array of less serious, but still troublesome, illnesses that beset young children in groups? Specifically, what effect will day care have on the incidence and severity of colds and other respiratory illnesses? Will children in groups have perpetual runny noses and will one infant in a group so spread his illness that no one will be safe? These questions are especially relevant for infant day care.

Several infant centers are currently collecting data on this subject, but to date only the Chapel Hill, North Carolina group, has published results. Over a 5-year period, this group studied respiratory illnesses in approximately 100 children who had participated, for some length of time, in the Frank Porter Graham Child Development Center. Most of the children entered day care before 1 year of age.

The average incidence of respiratory illness by the group was 8.9 illnesses per child per year. The highest incidence rate of 10 per year was in the children under one year, with the figure dropping below 8 per year in the three year olds. The Chapel Hill data were compared to data from a large metropolitan community which recorded an average of 8.3 illnesses per year for one year old children and 7.4 per year thereafter through age 5. Glezen, et al (1971) concluded that infant day care might be associated with a slight excess of respiratory illnesses in children under one year of age but that after that time the incidence figures were very similar to those reported for home reared children.

Data from this study should be very reassuring to those who are interested in operating infant day care programs. In the Chapel Hill Center, no attempt was made to isolate the ill children unless this appeared necessary for the ill child's own well-being. Of course, high standards of cleanliness were maintained by the staff. Also, all children received excellent medical care through the program and, by 1967, a full time nurse and part time pediatrician were part of the staff. Thus, one should not, from the results of this one study, rush to the conclusion that infant day care will never be associated with increased incidence of illness. Obviously the data at hand are from a high quality program which strove for optimal conditions for the maintenance of health. They are in the least encouraging.

4. Children in day care do not lose their attachment to their mothers. The Syracuse group (Caldwell, Wright, Honig, & Tannenbaum, 1970) investigated one extremely important aspect of social and emotional development of children in day care--the attachment of children to their own mothers, and the reciprocal attachment of the mothers to their children. Primary maternal attachment is considered an essential foundation to all other social attachments that a child forms in later life (Ainsworth, 1969). In order to obtain some information on how early day care

affects this basic attachment, the Syracuse staff compared two groups of mother-child dyads.

Children in one group of 18 mother-child pairs had been involved in the Syracuse day care program from the time they were approximately one year old. Children in the other group of 23 mother-child pairs had remained in the exclusive care of their mothers during that same period. All assessments were made when the children were approximately 30 months of age. Based on observations of interaction between the mothers and the children in a 3-hour session, interviews about the child's behavior at home, and discussions of the mother's own child-rearing patterns, a cluster of ratings pertaining to attachment behavior was made for each mother and child.

Findings of the study should be very reassuring to all persons concerned with infant day care. In terms of the attachment of the children for their own mothers, there were no significant differences between the day care and the home-reared infants. That is, the children who had been enrolled in day care and had been exposed to several adults daily since before their first birthday were just as attached to their own mothers as were the children who had remained at home during this same period.

The children were also rated on breadth of attachment, i.e., in terms of their attachment to people other than their mothers. They day care infants enjoyed interaction with other people more than the home-reared infants. This finding is compatible with data from a study by Schaffer and Emerson in Scotland (1964) which showed that infants who had had extensive contacts with other people tended to develop attachment to more people than infants who had been isolated.

In regard to strength of attachment of the mothers for their children, there were again no major differences between the groups. One important factor in this study was that all infants were at least six months old when they were enrolled in day care. This policy was adopted to permit the primary child-mother attachment to develop before the child was placed in a situation that might conceivably weaken it.

Other findings in this Syracuse study which, while not directly answering our question about the effects of day care upon social and emotional functioning, demonstrate the informational byproducts that can generally be expected from broad-based research. For example, when the day care and home-reared samples were combined, we found that strength of attachment of a child for his mother was correlated with developmental level. That is, children whose development was most advanced usually were rated as the most attached to their mothers. Similarly, there was some evidence that the most advanced babies tended to have the most attached mothers. Both of these findings corroborate the generalization that one cannot effectively separate early manifestations of intelligence from other aspects of development.

Several other projects are continually monitoring the social and emotional development of infants whose early experience has included day care. Within the next five years a great deal of information on this topic should be available to us.

5. Young children in day care do not necessarily become emotionally disturbed. This conclusion is also stated negatively, as there were valid theoretical reasons to remain alert lest this occur. Gain data from the Syracuse project can be offered to substantiate the point. In 1968 Dr. Samuel Braun, a child psychiatrist, was asked to do what is generally called a "blind" study on all the children in the group of three-four-year-olds (Braun & Caldwell, in press). For many people the only acceptable cutting point for enrolling children in day care was age three--any children put in such a situation at an earlier age were likely to become emotionally disturbed, or so it was predicted. Those of us who operated the Syracuse program were eager for reassurance that our procedure developed to offer cognitive and social enrichment was not producing emotional damage. Accordingly Dr. Braun spent

a week with the children in the two oldest groups--helping in the classrooms, eating with them, going to the bathroom with them, riding to and from school with them, talking with their teachers, just observing them, etc. At the end of that time he rated each child on a scale of 1-5, with "1" indicating good adjustment and "5" indicating poor adjustment. Of the total group only one child received a rating of "5" and only four received a rating of "4", indicating that in general the 30 children were relatively well adjusted. After having that as reassurance, we looked to see whether the distribution of ratings differed for the children who had entered the program younger than three and those who had enrolled at or after age three. The distributions of ratings for the two groups were virtually identical, indicating that early enrollment (prior to age 3) need not be associated with a high incidence of emotional disturbance. Again,more reassurance.

6. Children in day care develop a feeling of community. For some time we have thought that our early day care children "cared for" one another more than one usually finds in groups of children of similar age. (One informal criterion of this is that sometimes they seem to fight more--like siblings.) They are often deeply concerned about another child's rights, about whether Mary has had her turn or whether the teacher dealt adequately with Eric when he pushed Gerald off the tricycle. A hint that this might be the situation can be found in published reports (see Freud and Dann, 1944) of the social behavior of parentless children who were released from concentration camps in eastern Europe after World War II. These children seemed to find their strength in each other and to resist for some time the establishment of close ties with new adults and with other children. Currently Lay and Meyer are collecting some observational data on 20 kindergarten children who are "graduates" of the Syracuse Children's Center, most of whom have been together in day care from early infancy. These children are now enrolled in a school with 20 additional children who were not part of the day care sample. Using a time

sample observational technique, Lay and Meyer found that although the "new" children distributed their social encounters rather equally over the entire group of 40 children, the social interactions of the former day care children were largely among themselves. That is, they tended to stick with the children who had "graduated" to the new environment together, although over the course of the year (as new friendship patterns developed) this tendency weakened somewhat. This suggests that these little children from diverse family backgrounds moved to a new social setting as a small community--sticking together, helping one another, offering a familiar base until the new environment could be more readily apprehended. Several of the children were from unstable and disturbed families, and most were from families burdened in economic difficulties; yet their "togetherness" had helped them adjust to a new situation and had strengthened in them the feeling of community that we need to encourage in all children.

7. Children in day care have a better chance of being Americanized. I wish to use this rather archaic-sounding term--Americanize--to highlight the absurdity of some of the charges that have been leveled against the recently defeated (and momentarily underground) comprehensive child care bill. Everyone interested in day care knows the highlights in the sad chronology of events of December, 1971. The Comprehensive Child Development Act, inserted as a section of the bill authorizing extension of the OEO, passed the Senate, then the House, and then was promptly vetoed by the president. An attempt to over-ride the presidential veto in the Senate failed by seven votes to achieve the needed two-thirds majority. In his message accompanying the veto the president condemned the child care provision for its "fiscal irresponsibility, administrative unworkability, and family-weakening implications of the system it envisions." The president was justifiably concerned about this veto, as, shortly after taking office, he had by Executive Order created the Office of Child Development and had committed his office to do everything possible to strengthen programs for

children during the first five years of life. Although participation in the programs was to be voluntary, and although local parent councils would guide all programs that became operational, the president claimed to fear that the child development programs would eventually become mandatory and thus serve to destroy the family. He said "For the Federal government to plunge headlong financially into supporting child development would commit the vast moral authority of the National Government to the side of communal approaches to child rearing over against the family-centered approach."

An illustration of this position can be found in the following quote from the Congressional Record, the remarks made by a California legislator who shall remain nameless:

> "Of course, Mr. Speaker, they do not yet ask for power to take children by force. That never comes first. But, Mr. Speaker, as surely as twilight follows sunset and darkness follows twilight, it comes last. It is the end to which all such programs logically tend. The family is the backbone of any healthy society. Destroy the family and we destroy America. This 'child development' legislation aims at providing a substitute for the family in the form of committees of psychiatrists, psychologists, sociologists and social workers. But there is no substitute for the family. A Nation of orphanages cannot endure, and should not. It is an offense to God and man."

This bit of impassioned rhetoric was followed by the piece de resistance:

> "Walk into the halls of the Department of Health, Education and Welfare and think of having it in place of a mother."

This charge has come to be labeled the "Sovietization" issue--such programs will mean that we are changing our basic socialization pattern to conform to that used in collective societies. This is, of course, a spurious issue, deliberately employed to confuse and mislead. A few careful substitutions in part of the above quotation will perhaps help to strengthen my point:

> "This 'education' legislation aims at providing a substitute for the family in the form of committees of superintendents, principals, and teachers."

For is that not what we do in our public schools? Do we not now let teachers help our children learn how to read and cipher instead of their parents as used to be the pattern? And has not vocational education broken up the pattern of family apprenticeship? To assert that an experience which can help children achieve the goals for which this country stands will "Sovietize" them indicates just how far we have strayed from those original goals. Did we not develop a system of public education in this country precisely because our forefathers recognized that no set of parents could hope to do all that was needed to educate (i.e., socialize) their children?

Thus to counter some of the irresponsible charges as to possible consequences of progressive child development legislation, I wish to suggest that early child development programs can do much to help Americanize American children. Let me relate a poignant anecdote to illustrate my point.

This occurred in the kindergarten of our extended day school, a comprehensive educational day care facility for children ranging in age from under one year up through the sixth grade. One of the most popular children was a little white child whose two best friends, one a boy and one a girl, happened to be black. Around Christmas time the girl's parents indicated their intention to withdraw her from the school, as the racial composition had shifted from about 50:50 to 75:25 black-white. "It seems that she never talks about anybody but the black children," complained the parents. One of our social workers talked to the parents about the matter, trying to accept their feelings without remonstrance while reiterating our policy of admitting children without regard to race and urging that the child be permitted to remain in what was obviously a highly rewarding and enjoyable environment for her. The parents thought the matter over and kept the child in school. The first morning after the Christmas holidays, the little girl came into the room and, in her customary didactic style, pointed individually to each child in turn and announced, "I can play with you, and you, and I can't play with you, or you, or you. . ." With the honesty of a child she freely verbalized the agreement that had allowed her to remain in school: "If I do my momma's going to whip me and my brother's going to beat me up." The earlier favorite friends of the child were crushed, and the child herself had obvious difficulty remembering the new rules as she fell into her school routine. Fortunately with the help of a sensitive teacher who gently interpreted that rules that were made at home did not always have to be followed at school, the admonition was quickly forgotten and old friendships were restored.

To whom did the teachers in our day care school have an obligation? To those parents, whose love and devotion to their child expressed itself in a very un-American concept and type of behavior? Or to the child who deserved a better chance to learn how to adapt in a pluralistic society in which representatives of all ethnic and cultural groups have equal rights and privileges? Was the child who was being encouraged to behave in the context of a set of values that obviously contradicted those of the home being Sovietized? Communized? Not at all, but she was being Americanized. I submit that one of the nicer things that can happen to children in day care is that it gives them an opportunity to rise above their parents' narrowness of vision in realizing the fuller meaning of that now seemingly anachronistic phrase, the American dream.

Summary

In these remarks, I have tried to suggest that what happens to children in day care need not be a negative experience for young children, as so many people seem to fear today. In fact, in the few programs in which systematic research has been done, quite the reverse has been shown to be the case--quality day care is associated with intellectual gains, with the acquisition of adaptive social skills, and with healthy,physical and emotional development. A response to such data might be a rejoinder that such experiences can obviously be good for children but that they are seldom found in day care. What is the proportion of such programs amont the array of centers and day care homes scattered all over the country? In how many do you find happy children, and in how many do you find children eating lunch off the lid of the garbage pail (to cite one horror story that comes from my own state)? And in what proportion is there a sensitive program, geared to children's developmental needs in contrast to a steady diet of TV throughout the day? Unfortunately we do not know the answers to those questions, but one of the more encouraging trends of the past five years is that we are beginning to bring all categories of day care under public scrutiny. All states now have some kind of licensing procedure for day care, albeit the standards vary widely from state to state. And although licensing can in some respects be seen as encouraging premature crystallization of operational patterns without ample opportunity to explore and try different forms of service, in general it offers one of the best protective mechanisms that we have. If consumers are to get good day care, they must realize their obligation to find out about the situation, visit centers and keep in contact with state and national legislation programs.

Finally, I would like to suggest that as consumers we must all demand constant monitoring of day care programs to ensure experiences for our children that are conducive to wholesome development. Horace Mann once said that education was too important to be left up to either the professional educators or the parents--it had to be the concern of all citizens. The same is true of day care. Today one hears cries from potential consumers for more and better day care, and sometimes these demands appear to have but little concern for the welfare of the children involved. "We need more day care centers so their mothers can go to work and get off the welfare rolls." And, "We want more child care centers so that women can realize their potential." These are legitimate concerns of our society, for we do want our citizens to be able to function independently, and we do want our women to have an opportunity to realize their own destiny. But sometimes it is hard to shake the fear that those who make these demands are minimally concerned about what happens to the children. If day care does weaken family life, we need to know this, for as of this time we do not know of a successful way to rear children (in terms of how our society has traditionally defined success) apart from families. We must, in short, keep constantly attuned to generate continuing answers to the question asked in this paper. We can have cheaper day care by not bothering to monitor, by not bothering to care. But in the long run it will cost us much more.

REFERENCES

Ainsworth, M.D.S. Object relations, dependency, and attachment: a theoretical review of the infant-mother relationship. Child Development, 1969, 40, 969-1025.

Braun, S.J. and Caldwell, Bettye M. Social adjustment of children in day care who enrolled prior to or after the age of three. American Journal of Orthopsychiatry, in press, 1972.

Caldwell, Bettye M. and Richmond, Julius B. Programmed day care for the very young child -- a preliminary report. Journal of Marriage and the Family, 1964, 26, 481-488.

Caldwell, Bettye M., Wright, C. M., Honig, A. S. and Tannenbaum, J. Infant day care and attachment. American Journal of Orthopsychiatry, 1970, 40, 397-412.

Freud, A., and Dann, S. An experiment in group upbringing: Psychoanalytic Study of the Child, 1951, 6, 127-168.

Glezen, W.P., Loda, F.A., Clyde, W.A.,Jr., Senior, R.J., Schaeffer, C.I., Conley, W.G., and Denny, F.W. Epidemologic patterns of acute lower respiratory diseases of children in a pediatric group practice. Journal of Pediatrics, March 1971.

Keister, M.E. "The Good Life" for infants and toddlers. Washington, D.C.: National Association for the Education of Young Children, 1970.

Lay, M.Z. and Meyer, W.J. Effects of early day care experience on subsequent observed program behaviors. Final report, United States Office of Education, Subcontract No.70-007, Syracuse University, 1971.

Prescott, E., Jones, E., and Kritchevsky, S. Group day care as a child-rearing environment; an observational study of day care program. Pasadena California, Pacific Oaks College, 1967.

Robinson, H.B. and Robinson, Nancy M. Longitudinal development of very young children in a comprehensive day care program: The first two years. *in press*, *Child Development*.

Schaffer, H.R. and Emerson, P.E. The development of social attachments in infancy. *Monographs of the society for Research in Child Development*, 1964, *29* (3, Whole No. 94), 1-77.

APPENDIX H

CENTER FOR EARLY DEVELOPMENT & EDUCATION

TESTING SCHEDULE

Bettye Caldwell, Director

and

Phyllis Elardo, Research Coordinator

The following packet contains a summary of the testing program employed at the Center for Early Development and Education in the evaluation of our children's progress.

This summary contains two sections:

SECTION I is a description of the General Testing Schedule. The General Testing Schedule includes the following: names of test, administration month, and examiner. Most of the children at the Center will be tested according to the General Testing Schedule. The only deviation from the General Testing Schedule will occur when a pupil enters school at an odd time, or when a pupil must withdraw from school.

SECTION II contains the Alternate Testing Schedule and describes the tests to be used for entering pupils, and those to be used with pupils who plan to withdraw.

GENERAL TESTING SCHEDULE

INFANTS (6 months-18 months)
Supervisor: Ann Campbell

Experimental Group *
*All infants in the Center.

TEST	TIME OF YEAR	EXAMINERS
Bayley-Mental Motor	Every month to 12 month and then every 3 months to 3 years	Research assistants
Stim	Every year	Research assistants
Attachment Inventory	12 months	Research assistants
Behavioral Objectives	Fall-Spring	Teachers

SECTION I:

GENERAL TESTING SCHEDULE

TODDLERS (18 months-36 months)
Supervisor: Ann Campbell

Experimental Group*
*All children in this age range enrolled in the Center

TEST	TIME OF YEAR	EXAMINER
Stim	Every year from date of entry	Research assistants
Binet	Every 3 months after age 2	Research assistants
Bayley, Mental and Motor	Every 3 months from time of entry	Research assistants
California Preschool Social Competency Scale: 2½ year olds	May	Teachers and aides
Behavioral Objectives	Spring - Fall	Teachers
Language Tests: Preschool Language Scale	September	Dick and research assistants
Observations	May	Dick and research assistants

SECTION I:

GENERAL TESTING SCHEDULE

Three Year Olds
Supervisor: Phyllis Melton

Experimental Group*
*All children enrolled in the preparatory division at the three year level.

TEST	TIME OF YEAR	EXAMINER
Binet (Bayley, if necessary)	April-May	Research assistants
ITPA (all subtests)	April-May	Research assistants
Preschool Inventory	April-May	Research assistants
California Preschool Social Competency Scale	April-May	Teachers and aides
Behavioral Objectives	Sept-May	Teachers
Stim	Every year	Research assistants
Language tests:		
Assessment of Children's Language Comprehension	Sept-May	Dick and research assistants
Expressive Vocabulary Inventory	Sept-May	Dick and research assistants
Modified version of Blank's Language Production Test	May	Dick and research assistants

SECTION I: GENERAL TESTING SCHEDULE

Four Year Olds
Supervisor: Phyllis Melton

Experimental Groups*
*All children enrolled in the preparatory division at the four-year-level

TEST	TIME OF YEAR	EXAMINER
Binet	April-May	Research assistants
ITPA (all subtests)	April-May	Research assistants
Preschool Inventory	April-May	Research assistants
California Preschool Social Competency Scale	April-May	Teachers and aides
Behavioral Objectives	Sept-May	Teachers
Stim	Every year	Research assistants

SECTION I:

GENERAL TESTING SCHEDULE

Five Year Olds
Supervisor: Phyllis Melton

Experimental Groups*
*All children enrolled in the preparatory division at the five-year-level.

TEST	TIME OF YEAR	EXAMINER
Binet	April-May	Research assistants
ITPA (all subtests)	April-May	Research assistants
Preschool Inventory	April-May	Research assistants
California Preschool Social Competency Scale	April-May	Teachers and aides are raters
Behavioral Objectives	Sept-May	Teachers
Stim	Every year	Research assistants
Metropolitan Reading readiness	Spring	Teachers and research assistants

SECTION I: GENERAL TESTING SCHEDULE

LEVELS 1, 2, 3
Supervisor: Phyllis Melton

Experimental Group*
*All children in levels 1, 2, 3 at Kramer School

TEST	TIME OF YEAR	EXAMINER
Lorge: Level 3	February	Teachers *
Otis: Level 2	February	Research assistants
Otis: Level 1	February	Teachers *
Iowa: Level 3	April-May	Teachers *
Metropolitan: Level 2 Primary 2, Form F, 1970 ed.	April-May	Teachers *
Metropolitan: Level 1 Primary 1, Form F, 1970 ed.	April-May	Teachers *
Metropolitan Reading Readiness	September	Teachers *
Devereux	May	Teachers
Gray	April	Research assistants
WRAT - reading	May	Research assistants
*Binet (Level 1 & 2 - 1972 Level 1,2,3, - 1973 & beyond)	May	Research assistants
*ITPA (Level 1 & 2 - 1972; Level 1, 2, 3 - 1973 & beyond)	May	Research assistants

---

* Research assistants will be available upon teacher's request

LEVELS 1, 2, 3
(Cont'd)

TEST	TIME OF YEAR	EXAMINER
Role Taking Tasks	Oct-May	Phyllis E. and Research assistants
Story Alternatives	Oct-May	Phyllis E. and Research assistants
Sociogram	Oct-May	Phyllis E. and Research assistants
Clinical Assessment	May	Outside Observer
Playground observations	Nov-May	Phyllis E. and Research assistants

SECTION I:

GENERAL TESTING SCHEDULE

LEVELS 1, 2, 3
Supervisor: Phyllis Melton

Control Group*

*Matched sample to Kramer children at levels 1, 2, 3, to be based on race, sex, group IQ, and housing

TEST	TIME OF YEAR	EXAMINER
Iowa: Level 3	April-May	Teachers
Metropolitan: Level 2 Form F, 1970 ed.	April-May	Teachers
Metropolitan: Level 1 Form A, ITA, 1965 ed.	April-May	Teachers
Lorge: Level 3	February	Teachers are proctors
Otis: Level 2	February	Research assistants
Otis: Level 1	February	Teachers
Gray (ITA)?	April-May	Research assistants
Devereux	May	Teachers
WRAT (ITA)? Reading	May	Research assistants

SECTION I: GENERAL TESTING SCHEDULE

LEVELS 4, 5, 6
Supervisor: Phyllis Melton

Experimental Group*
*All children in levels 4, 5, 6 at Kramer School; Average house value - county assessor for SES

TEST	TIME OF YEAR	EXAMINER
Iowa (Levels 4-6)	April-May	Teachers *
Gray	April	Research assistants
Devereux	May	Teachers
Lorge-Thorndike	February	Teachers *
Level 5	February	Teachers *
Level 4	February	Research assistants
Level 6	February	Research assistants
Binet		
(Level 4 - 1974 and beyond)	May	Research assistants
(Level 5 - 1975 and beyond)		Research assistants
(Level 6 - 1976 and beyond)		Research assistants

---

* Research assistants will be available upon teacher's request.

SECTION I:

GENERAL TESTING SCHEDULE

LEVELS 4, 5, 6
Supervisor: Phyllis Melton

Control Group*

*Matched sample to Kramer children at levels 4 and 5, to be based on race, sex, group, IQ and (average house value - county assessor)

TEST	TIME OF YEAR	EXAMINER
Iowa	April-May	Teachers
Gray	April	Research assistants
Devereux	May	Teachers
Lorge-Thorndike		
Level 5	February	Teachers
Level 4	February	Research assistants
Level 6	February	Research assistants

SECTION II

ALTERNATE TESTING SCHEDULE
Supervisor: Phyllis Melton

1. New Entries: Preparatory

A. All new entries should be given: (according to age level)

Stanford-Binet or Bayley
Illinois Test of Psycholinguistic Abilities
Preschool Inventory
Inventory of Home Stimulation
Attachment Inventory
Behavioral Objectives

If the new child enters before December 1st, he will be re-tested on the regular spring schedule.

If the new child enters after December 1st, and also plans to attend the Center during the summer, he should be tested six months from the date of his first testing. If the child does not plan to attend the Center during the summer, he should be tested at the end of May. His future testing will then be on the regular testing schedule.

2. New Entries: Elementary (Supervisor: Penny Mayer)

A. If a child enters Level 1-6 before December 1st, he is to be given the following battery:

Fall 1972

Level I-Binet, ITPA, Metropolitan Reading Readiness
Level II-Binet, ITPA, Metropolitan: Primary I, Form F, 1970 ed.
Level III-Binet, ITPA, Metropolitan: Primary II, Form F, 1970 ed.
Level IV-Iowa Test of Basic Skills (Grade 3)
Level V-Iowa, Test of Basic Skills (Grade 4)
Level VI-Iowa Test of Basic Skills (Grade 5)

Fall 1973

Level I-Binet, ITPA, Metropolitan Reading Readiness
Level II-Binet, ITPA, Metropolitan: Primary I, Form F, 1970 ed.
Level III-Binet, ITPA, Metropolitan: Primary II, Form F, 1970 ed.
Level IV-Binet, Iowa Test of Basic Skills (Grade 3)
Level V-Iowa Test of Basic Skills (Grade 4)
Level VI-Iowa Test of Basic Skills (Grade 5)

Fall 1974

Level I-Binet, ITPA, Metropolitan Reading Readiness
Level II, Binet, ITPA, Metropolitan: Primary I, Form F, 1970 ed.
Level III-Binet, ITPA, Metropolitan: Primary II, Form F, 1970 ed.
Level IV-Binet, Iowa Test of Basic Skills (Grade 3)
Level V-Binet, Iowa Test of Basic Skills (Grade 4)
Level VI-Iowa Test of Basic Skills (Grade 5)

Fall 1975

Level I-Binet, ITPA, Metropolitan Reading Readiness
Level II-Binet, ITPA, Metropolitan: Primary I, Form F, 1970 ed.
Level III-Binet, ITPA, Metropolitan: Primary II, Form F, 1970 ed.
Level IV-Binet, Iowa Test of Basic Skills (Grade 3)
Level V-Binet, Iowa Test of Basic Skills (Grade 4)
Level VI-Binet, Iowa Test of Basic Skills (Grade 5)

If a child enters Level 1-6 after December 1st, then he should be given the following battery

Gray Oral Reading Test
WISC. vocabulary
Wide Range Achievement Test-arithmetic
Beery Visual-Motor Developmental Test (Levels 1-3)
Bender (Levels 4-6)

3. Withdrawal: Preparatory (Supervisor: Phyllis Melton)

A. If a child is about to withdraw from the program, he should be given the following battery*

Binet
ITPA
PI

California Preschool Social Competency Scale

Every attempt should be made to follow up on the child's progress in another preschool and to follow his progress in public school.

* This procedure applies to children who have been in the program for 3 months or longer.

4. Withdrawal: Elementary (Supervisor: Penny Mayer and Phyllis Melton)

A. If the child is about to withdraw from the program, he should be given the following battery*

Gray Oral Reading Test
WISC vocabulary
Wide Range Achievement Test-arithmetic
Beery Visual-Motor Developmental Test (Levels 1-3)

Devereux

B. If a child has attended our preparatory school, then he should be given the Binet in addition to the tests listed above.

* This procedure applies to children who have been in the program for 3 months or longer.

5. Control Groups

A. There should be a follow-up on all children who were tested in the spring of 1971 and the spring of 1970. These children should be given the following battery of tests in June of 1972, 1973.

Binet
ITPA
PI
Stim

The six, seven, eight year olds from the spring of 1971 should be followed up and the following information should be collected

Binet Stim
ITPA

Metropolitan
Iowa Test of Basic Skills from school district
Otis
Lorge
Devereux - classroom teacher

6. Proposed control group

The possibility of bringing children from the surrounding area for control testing during January, February, and March in addition to June was considered as workable. These children would be contacted in 12 months and tested each year thereafter.

Each child would be placed in a classroom appropriate to his age group for several mornings and then tested with the battery described for his level. Approximately 2 children per week would be brought into the Center at each of the following age levels -- 3, 4, 5.

APPENDIX I

CENTER FOR EARLY DEVELOPMENT

AND EDUCATION

INTRODUCTION

The materials assembled in this booklet are being used in a multi-level home intervention project that is part of the research program of the Center for Early Development and Education. We are attempting to determine the effectiveness of different types of home intervention, recognizing that no one pattern will ever adequately serve the needs of all families. We are trying out the usefullness of these materials under the following conditions:

(1) Giving the written materials and the toys necessary to carry out the enrichment activities to the mother, a few pages at a time, with only a brief demonstration. The materials are handed out to the mother immediately after the child has been given an infant test. However, that timing is not crucial to our conceptualization of the way in which the materials might be used at this minimal level of intervention. For example, they might be handed out to a mother who has an appointment in a well baby clinic. They could be offered as "take home materials" similar to pamphlets on infant feeding, parent-child relations, and so on, that are often made available to parents in well child clinics.

(2) Home intervention plus interpersonal relationship with the mother. The second level of intervention involves having a staff member of our project go to the home of the parent and child and demonstrate the activities to the parent. This demonstration is conducted with the materials, thinking of the mother-infant diad as the target. The technique is very similar to the one used by Phyllis Levenstein in her research. An attempt is made to establish an on-going relationship with the mother, and time in the interview is made available to talk about areas of concern that the mother might have. Thus,

> although the intervention visit is essentially child-centered, the needs and interests of the mother are by no means neglected. The whole activity is carried out with something of the attitude of friends or neighbors having a social visit. The home visits are made bi-weekly.

The written suggestions are not given out as assembled here. Four or five age-appropriate ones are selected from the total array (and new ones are always being prepared) and given to the mother at the time of the mother's visit to the Center for testing or the staff member's visit to the home. The printed activity guide along with the necessary materials for carrying them out are put in a paper bag and given to the mother. In our own office we have organized the activities roughly according to age level. That is, there is a bag that deals with activities appropriate to the 8 to 10 month age range, 10 - 12, 12 - 15, and so on. However, the activity kits are selected more in terms of what we know about the child's developmental achievements than chronological age per se.

The materials assembled in this booklet cover the age range of roughly eight to 24 months. Materials appropriate for 24 - 48 months are currently in preparation. The toys placed in the kits are given to the parents and they are not expected to return them. This was done because we feared that parents would not fully utilize the materials if they felt they had to turn them back in at a later time. Infants can be hard on toys and teaching materials, and we were concerned lest mothers fear that they would have to pay for materials that a child had damaged. Because of this pattern we have limited the value of any given kit of materials to seventy-five cents. Actually if they were ever prepared on a larger scale, the cost could be be reduced by half.

Many people on our staff are working either in the project in terms of introducing the materials to parents or in the preparation of the suggested teaching activities. People who have worked on the materials include:

Research Design

Bettye Caldwell
Rosanne Gmuer

Preparation of Written Materials

Bettye Caldwell
Ann Campbell
Nancy Goss
Julie Honey

Purchase and Making of Toys

Ann Campbell
Andrea Gillespie
Nancy Goss
Barbara Huban

Testing

Ann Campbell
Nancy Goss
Barbara Huban
Penny Mayer
Phyllis Melton

Typing and Art Work

Dorothy Rhoads
Sandy Singleton

Printing and Assembly

Jimmie Jefferies

Gathering of Infants

Dorothy Corbitt
Evelyn Jackson (and referal from many mothers already involved)
Pat Walter

Home Intervention

Dorothy Corbitt
Andrea Gillespie
Julie Honey
Nina Latimer
Joan Rorex
Marnette Trotter

We would appreciate comments from any persons who try out the materials with parents and children.

BETTYE M. CALDWELL, Director
Center for Early Development
and Education
University of Arkansas
814 Sherman Street
Little Rock, Arkansas 72202

THINGS TO REMEMBER

1. Make this a fun time.

2. Keep it light and easy.

3. Don't push too hard if your child isn't interested. Don't feel bad if he doesn't want to play. Try again later.

4. Spend just a few minutes each play time.

5. Praise your child. Smile, laugh, look proud if he does what you are trying to teach him to do. Don't scold him if he doesn't do it. Smile and try again later.

6. Help him. Don't expect him to do too much on his own. He will be more interested in the toys if you are interested in them, too.

7. Talk to your child a lot. Don't feel silly. Don't worry about using "baby talk" if it seems like a good thing to do.

8. When he makes sounds and seems to be trying to talk, answer your child.

9. Say his name often. Say his name when you praise him--"That's a good boy, John!"

10. Some of the teaching can be done while you are working (cleaning house or doing dishes). Save a few minutes for you and the baby to sit down for a "special time."

11. Make up other games like the ones we have played with your child. This can be done with things you have around the house.

EXPLANATION

The age limitations of each intervention item are quite flexible. The toys and tasks may be expanded as the child increases in mobility and vocalization. The types of toys we have chosen for our intervention are not expensive, may be found (or duplicated) in the home, and should be considered as "types" rather than specific items.

CODE: A--0 to 6 months
B--6 to 12 months
C--12 to 18 months
D--18 to 24 months
E--24 to 30 months
F--30 to 36 months

CHASING

Material--a ball

Sit on the floor with your baby. Roll the ball to him.

Say, "Get the ball."

Let him chase the ball and push it around.

Directions: Next visit, see if your child will crawl (or walk) after the ball.

B and C

LISTENING

Material--a bell

Stand behind your baby and ring the bell.

When he turns toward the sound, show him the bell.

Put the bell in his hand.

Show him how to ring the bell.

Directions: Next visit, see if he can pick up the bell and ring it.

A-C

BLOCKS[1]

Materials--blocks

Let your baby watch while you stack two blocks.

See if he can put one on top of another.

Praise him loudly if he stacks a block (or two or three!).

Directions: Next visit, see if he can build some blocks for us.

A and B

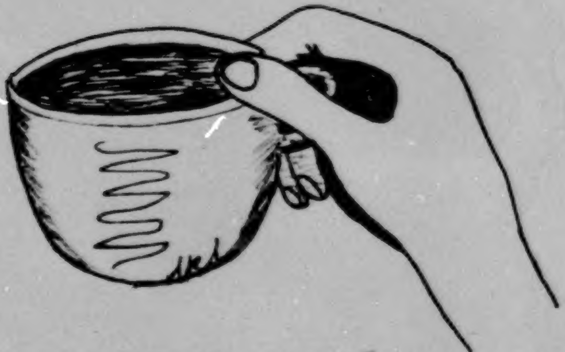
CUP[1]

Materials--cup

Show your baby how to hold a cup by the handle.

See if he can pick the cup up this way.

Directions: Next visit, see if he can use the handle on a cup.



A-B

CUP^2

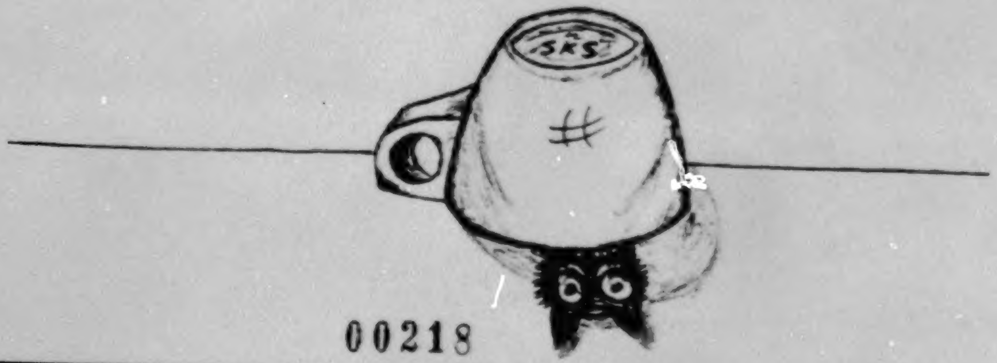
Materials--cup, small toy or cereal

Hide a piece of cereal under the cup.

Make sure the baby sees you do this.

Encourage him to find the hidden toy (or cereal).

Directions: Next visit, see if your baby can "find" what is under the cup.



B and C

PLACING IN CUP[3]

Materials--clothespins and cup

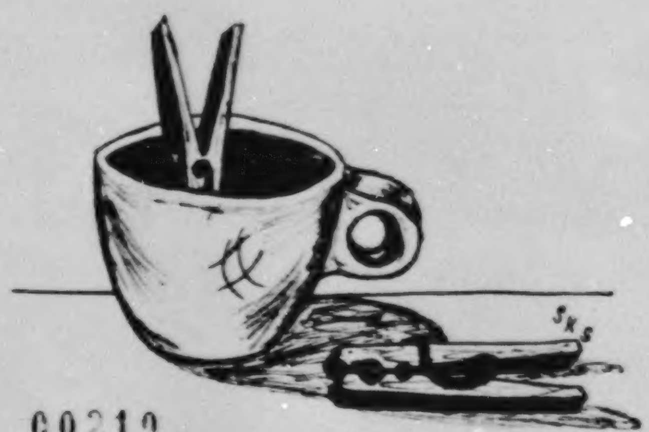
Drop some clothespins (one or two) in the cup.

Do this many times.

See if your baby can put them in the cup.

Clap for him when he does.

Directions: Next visit, see if your baby can play this game with us.



B and C

BOOKS

Material--a book

Sit with your baby and show him a book.

Point to the pictures.

Tell him about the pictures.

Show him how to turn the pages.

Let him see that you like books.

Directions: Next visit, we will look at a book together.

A-F

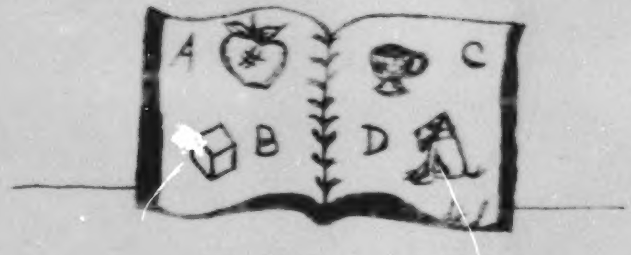
READING

Material--a book

Read out loud to your baby from a book each day.

The new words he hears will help him talk and read better when he is older.

Directions: Try to read from five to ten minutes each day to your baby.



B-F

HANKIE

Materials--hankie and toy

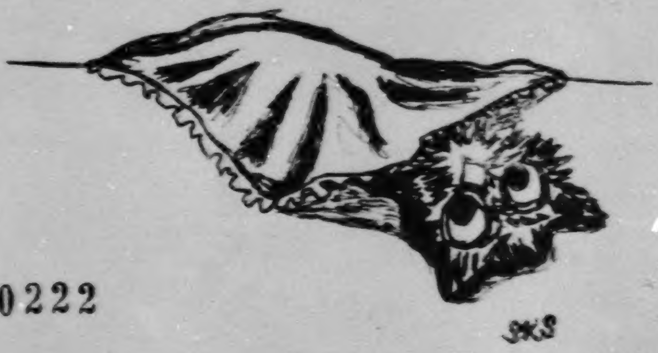
Cover the toy part of the way with the hankie.

Do this while the baby watches.

Make sure some part of the toy is showing.

Point to the hankie. Say, "Find the ________."

Directions: Next visit, see if your baby can find a toy that is partly hidden.



MIRROR

Material--large mirror or hand mirror
that you hold (be careful!)

Hold your baby in front of the mirror and say, "See the baby."

Point to the baby in the mirror and say, "Hi, Baby." "Where's the baby?" "There he is."

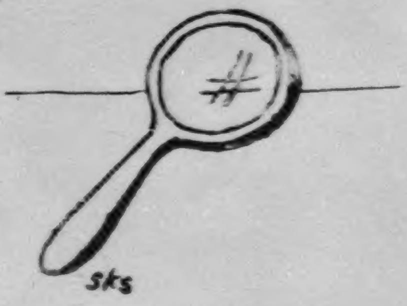
Let your baby pat the mirror and give it a kiss.

Say, "Love the baby."

Let your child explore the mirror image.

Encourage him to smile.

Directions: Next visit, see if your baby can point to himself in the mirror.



A-F

RING

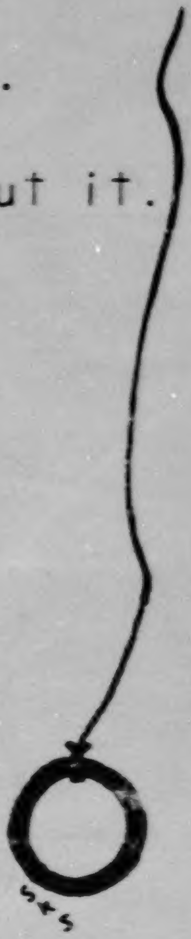
Materials--ring and attached string

Dangle the ring in front of your baby.

Swing the ring back and forth by the string.

Encourage your baby to take the ring.

Let him hold it and find out all about it.



Directions: See if your baby will grab the ring on our next visit.

B and C

RING^2

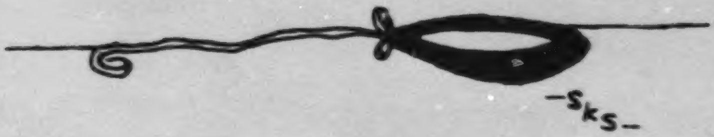
Materials: ring and attached
string

Let your child hold the ring. Then, put it out of his reach.

Point the string toward him.

Show him how to pull the string and make the ring come to him.

Directions: Next visit, see if he can
pull a toy or the ring by
the string.



A and B

SCRIBBLING

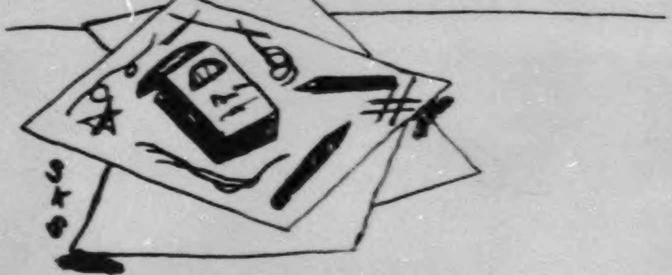
Materials--paper and crayons

Draw circles or lines on a piece of paper.

Encourage your child to watch you make marks on the paper.

Let him try to make marks if he wants to.

Directions: Next visit, see if he will watch while someone else scribbles.



B and C

TALKING[a]

Materials--you, your child, a spare
(or busy) minute

Find time to talk to your child about what you are doing.

Tell him the parts of the body as you change him.

Explain what you are doing when you clean house.

Take TIME to talk to your baby today!

A-F

TALKING[b]

Stress copying words and sounds. You copy the baby's sounds. If he says, "Grfm," you say "Grfm" back to him sometimes.

Encourage him to copy your sounds.

Work on "Ma-ma," "Da-da," "Baby," "bow-wow," "T.V.," "no-no," "bye-bye," and "bottle."

IMITATIVE PLAY (COPYING)

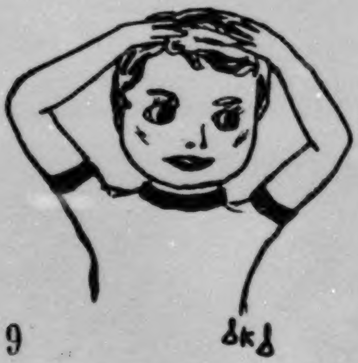
Materials--you and your child

Sit on the floor with your child and kick your feet (or pat your head or clap your hands).

Praise him if he copies your actions.

It is very important for your child to learn to imitate others.

Directions: Next visit, see if your child can copy something that you do.



B-D

IMITATION

Material--a doll

Take a doll and get your baby to do whatever you do--"Pat the baby," etc.

"Wipe the baby's nose."

"Love the baby."

B-D

"PEEK-A-BOO"

Materials--you and your child

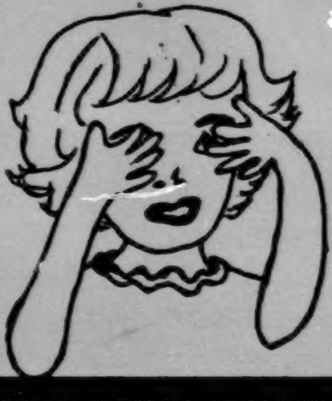
Hide your face with your hands (or cover it with a wash cloth).

Say, "Where's Mommy?" Peek our and say, "There she is!"

Hide your baby's face briefly and say, "Where's Baby?" "There he is!"

Directions: See if your baby will play "Peek-A-Boo" next visit.

B



HIDE AND SEEK

Materials--you and your child

Hide behind a chair or behind the door.

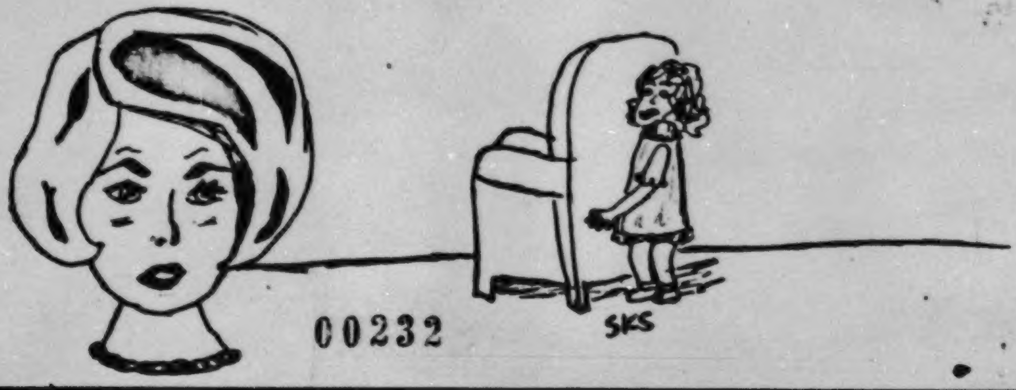
Say, "Find Mommy. Where is Mommy?"

Encourage your child to come and find you.

See if he will hide and let you look for him.

(Stress the briefness of the separation.)

Directions: Play "Hide and Seek" on the next visit for me.



B-F

FINDING THINGS

Materials--you and your child

Hold your child in your arms.

Say, "Where's the light?" (or "Where's your bottle?" or "Mommy?" or "Daddy?", etc.).

Help him find it with his eyes.

When he is older, help him point to it.

Directions: See if your baby will look for things with his eyes.

B and C

HIDDEN TOY

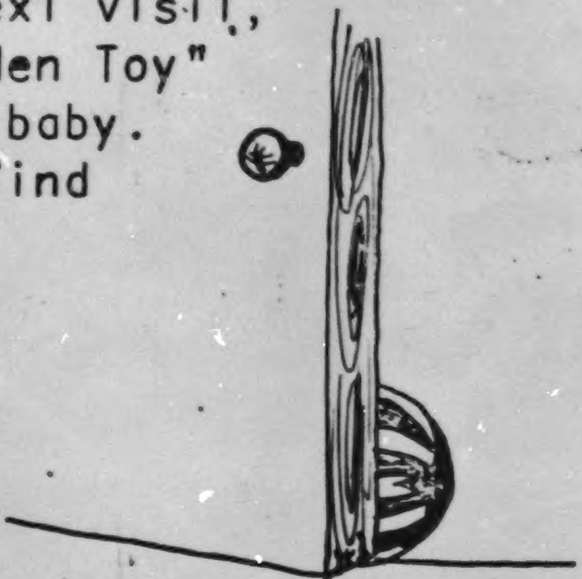
Materials: A favorite toy
(stuffed animal, etc.)

Hide a special toy of your child's behind the sofa or behind the door.

Leave it showing a little bit. Help him find it.

Clap your hands and be excited when he finds it.

Directions: Next visit, play this "Hidden Toy" game with your baby. See if he can find the toy.



B-C

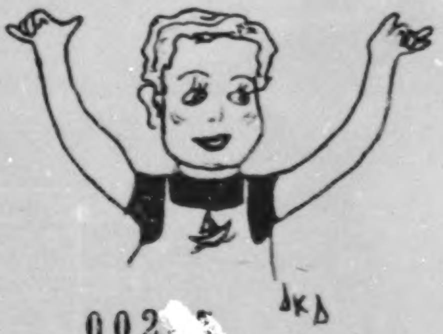
"SO BIG"

Materials--you and your child

Say, "How big is ___________?" While you say this, stretch your arms above your head.

Answer, "___________ is so big."

Directions: Next visit, see if your child can lift his arms up when you play this game.



B and C

"LOVE THE BABY"

Materials--doll, kleenex, comb

Say, "Love the baby." As you say this, give the doll a pat or a kiss.

Show your child how to wash the doll's face (or comb the doll's hair, wipe the doll's nose, or rock the baby).

Directions: See if your baby can do one of these things on the next visit.

B-D

PARTS OF THE BODY

Materials--you and your baby

Say, "Where's your nose?" to your baby. Touch his nose and say, "Here it is."

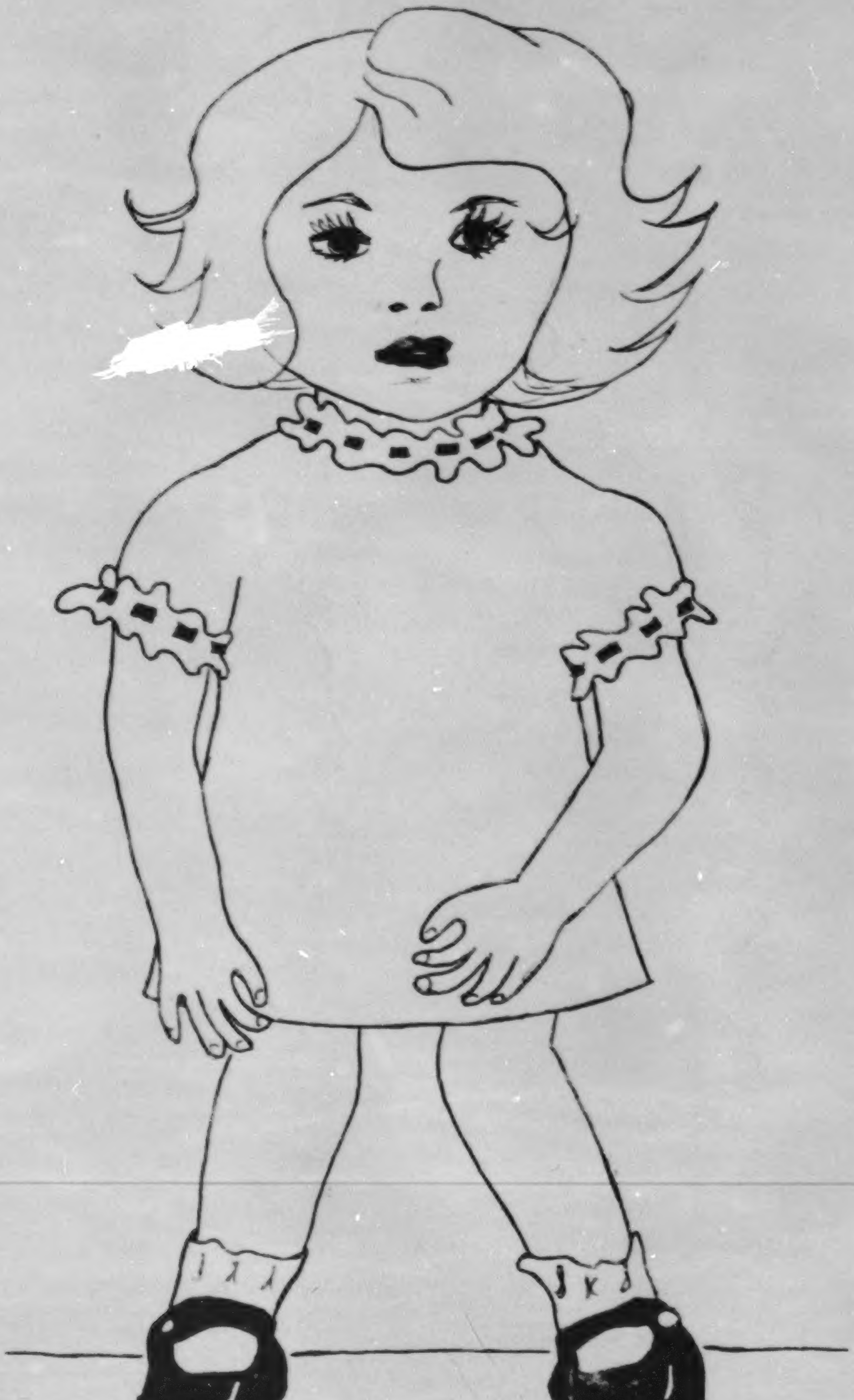
Say, "There's Mommy's nose," and let your baby touch your nose.

Help your child find his eyes, ears, mouth, and other parts of the body.

As he grows older, name hands, feet, legs, arms, and so on.

Directions: Just naming the parts of the body will help your child learn them later. Do not expect him to be able to find them yet.

C



C

00238

BUBBLES

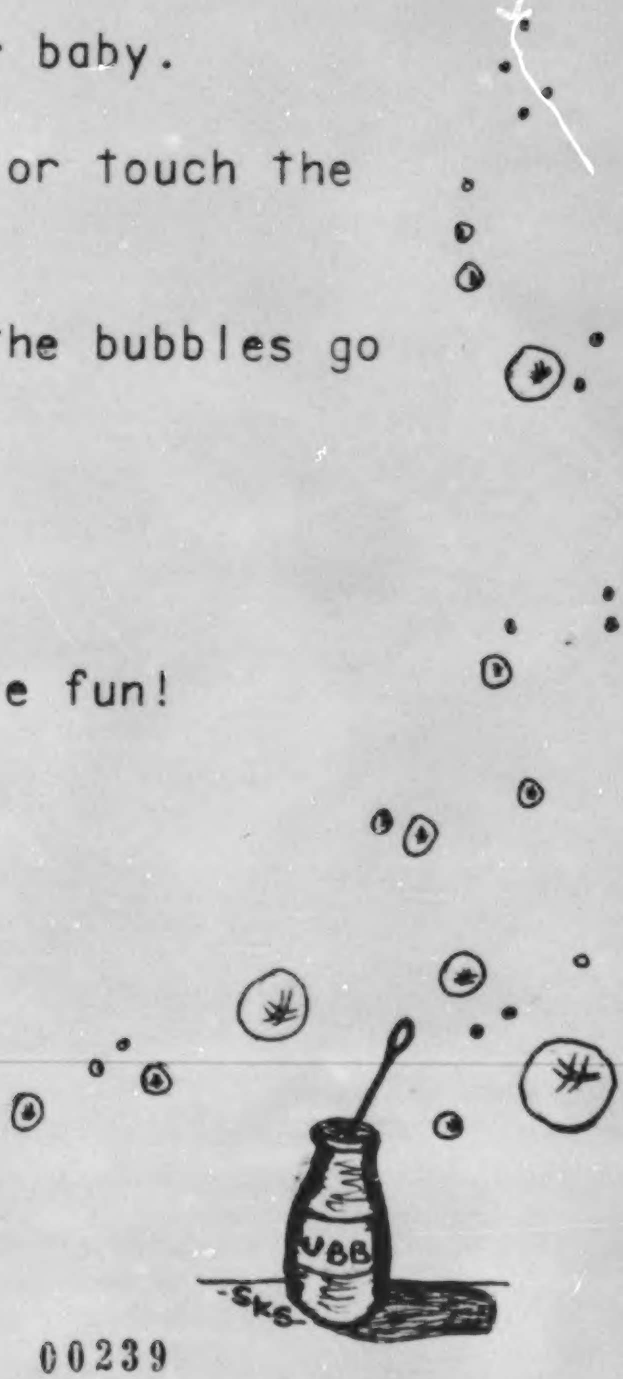
Materials--bubble maker

Make bubbles for your baby.

Let him try to catch or touch the bubbles.

Laugh with him wien the bubbles go away.

Directions: Have fun!



B-F

DROP THE SPOOLS

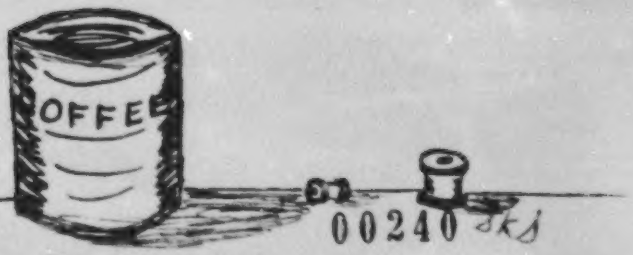
Materials--coffee can and spools
(or walnuts)

Show your baby how to drop the spools into the can.

See if he will put some spools into the coffee can.

Directions: Try to help him put 6 or 8 spools into the coffee can.

B and C



00240

CAR (BUG)

Materials--a small car (or bug)

Show your child how to push the car (or bug) along the floor.

Make "car noises" as you push it.

Say, "Park the car," and roll it under a chair or table.

Directions: See if your baby can push the car on the floor on the next visit.

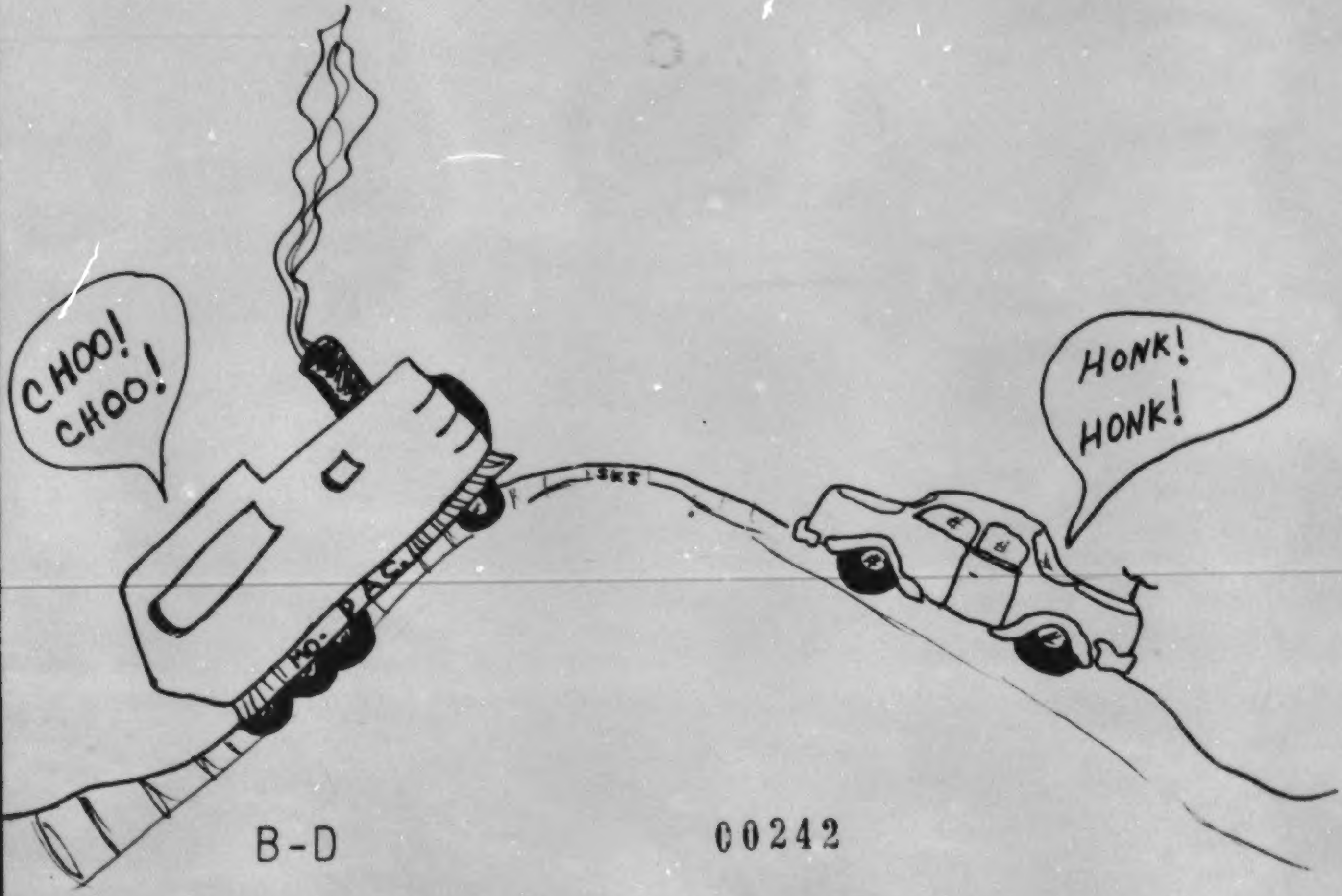
B-D

CAR SOUNDS

Materials--car, plane, etc.

Make sounds of motors while pushing a toy along--"Choo choo" (car sound, plane sound, etc.).

Encourage him to make the sounds with you.


CHOO! CHOO!
MO. PAC.
HONK! HONK!

SAME

Materials--any 2 household objects that are the same (2 spoons, 2 spools of red thread, 2 buttons, etc.)

Help your child understand which items are the same and which items are different.

Say, "These spoons are the same. Let's put them together."

Encourage him to group things that are the same.

TWISTING

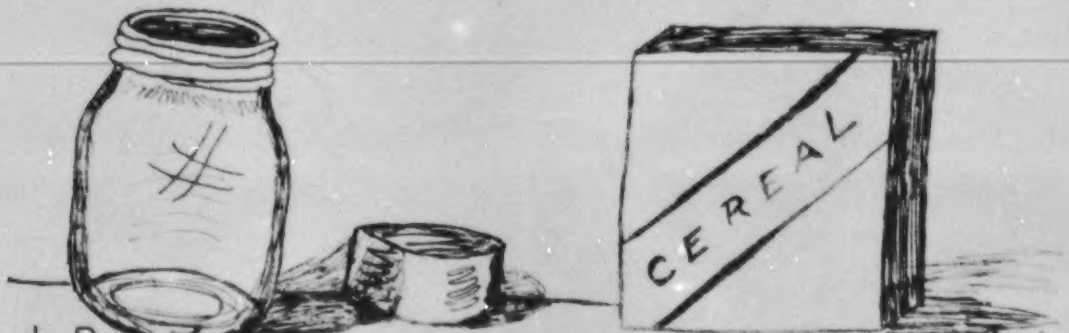
Materials--a jar, lid, and cereal (empty baby food jars are suggested)

Put the lid loosely on the jar.

Show the baby how to unscrew the lid.
Help him to get the cereal out of the jar.

Repeat.

Directions: See if your baby can do this on the next visit.



C and D

SELF-HELP

Encourage your child to take off his shoes and socks.

As soon as he learns to take them off, help him learn to put them back on again.

Say the words as you do this.

Praise him when he does it.

D-F

EARLY ACTION WORDS

(Level II)

Sometimes it is easier for a baby to learn the names of things than it is to learn action words. Once he learns to walk, he will spend many happy minutes carrying out requests that let him move from one place to another.

Use this to help him learn such words as: come, go, get, give, bring, put, find, take, show. Say such things as:

"Come to Mama."
"Go get your bottle."
"Put the cat down."
"Bring me your socks."
"Where is your shoe? Go find your shoe."
"Give it to Mommy."

If he looks puzzled or ignores you, take him by the hand and do it with him. Say, "Let's go find your shoe." Then, when you find it, point or pick it up and say, "There's your shoe. We found it!"

B-F

GROUPING

Materials--plastic spoons and forks,
all of the same color

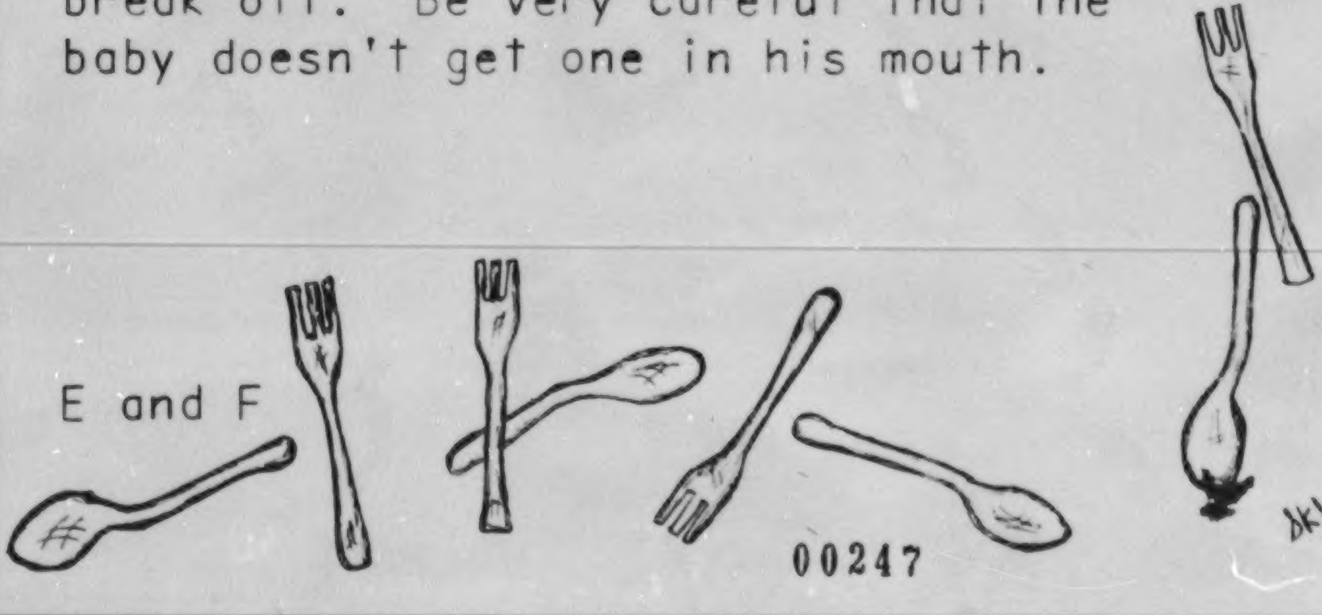
Have your baby sort the spoons and forks according to their use.

Say to him, "Give me all of the spoons" (or knives or forks).

Praise your baby.

When he gives you the last one, pretend to eat with it. Say, "Mmmm--good! Have some." Laugh.

Note--Sometimes the ends of the forks break off. Be very careful that the baby doesn't get one in his mouth.



E and F

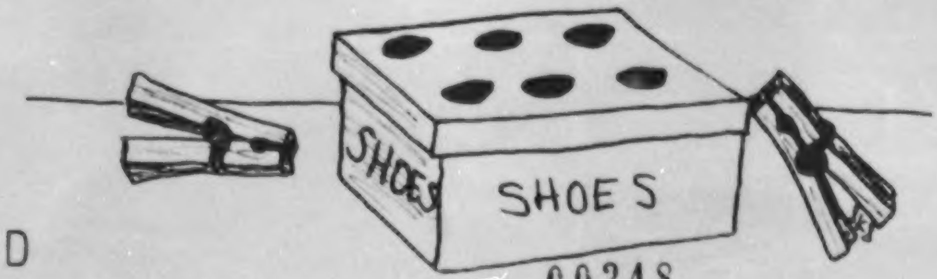
CLOTHESPIN LIFT

Materials--a shoe box top and 6 clothespins

Cut some holes in a shoe box top to fit the clothespins.

Fit the clothespins into the holes. Say to your child, "Take them out." Show him what you mean.

When the clothespins are out of the box, encourage him to put them back into the holes. Help him at first. Guide his hand if necessary. Help him learn to lift straight up. At first, most babies pull the pegs toward them.



C and D

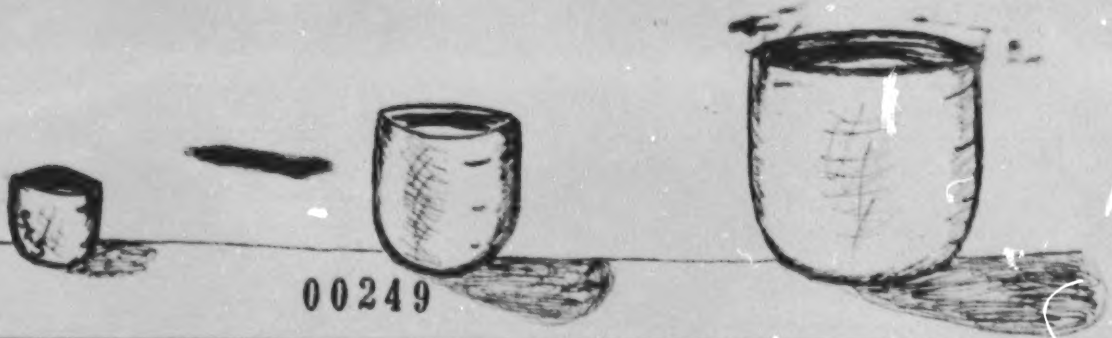
STACKING CUPS

Materials--measuring cups

Show your baby how to put a little cup inside of a bigger cup.

Help him to choose the right cup.

Directions: See if your baby can (with help) stack 3 cups.



C-E

LEARNING ABOUT SIZE

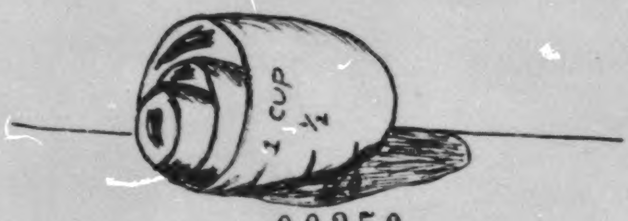
Many wonderful things can be done with a set of metal or plastic measuring cups.

Give them to your baby when he is sitting in his highchair--or any place where he has a tray or table in front of him.

Let him play with the cups. If he does not do it by himself, show him how to put one cup inside of another. Say, "Put the little ones in the big one." Later on say, "______, give me the big cup" or "Give me the little cup."

Praise your child often.

Sometimes when you are busy, one of the older children can play this game with the baby. They like to feel that they are helping their "baby" learn.



C -E

HIDING AND FINDING

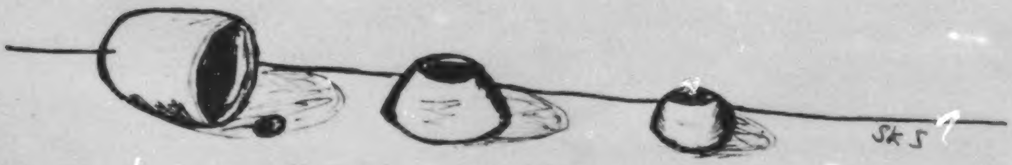
Materials--a set of nesting measuring cups and a piece of round dry cereal or a raisin to hide

Take 2 of the measuring cups and hide a piece of cereal under the bigger cup. Say to your child, "Get the Cheerio. It's under the big cup." Try this over and over.

Praise your child often. He won't learn to do it all at once.

Next, hide the cereal under the little cup and ask your child to find it. Be sure to use the words big, little, cup, cereal, and raisin often.

Another time--Give him just 1 cup and both a raisin and a piece of cereal. Hide both and ask, "Give me the raisin" or "Give me the Cheerio."



B-E

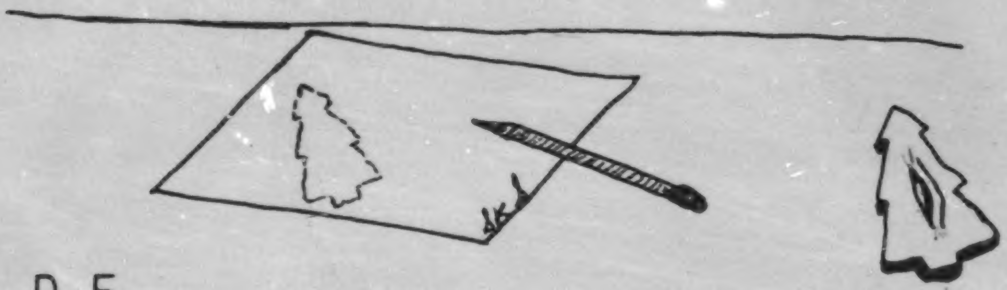
MATCHING SHAPES

Materials--cookie cutters with
cardboard tracings of
the cookie shape

Encourage your child to put the cookie cutters down on the proper cardboard shapes.

Trace around the shapes and help your child to place the cutter on its drawn shape.

Praise your child often.



D-E

UNDERSTANDING WORDS

Encourage your child to look at the stove, the light, his sisters and brothers, or his father.

Encourage him to look by looking at the items yourself.

Praise your child often.

Before a baby can talk, he has to learn to "make sense" out of the sounds he hears. Every day you should "test" him to find out which words he knows.

B-F

LOOKING AND POINTING

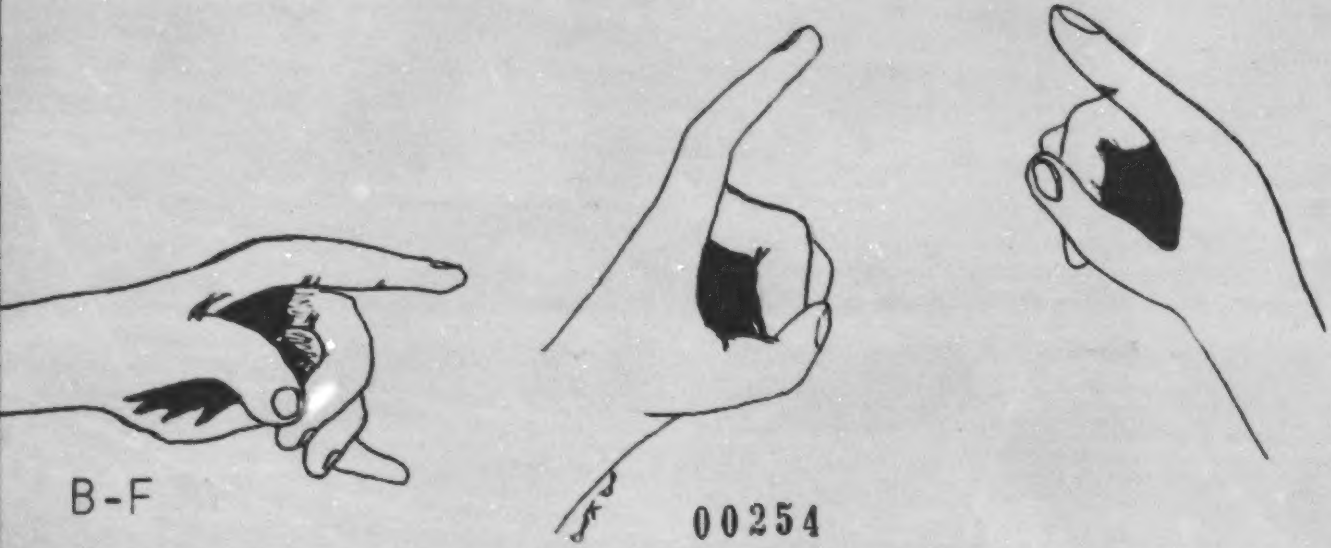
Help your child learn to point.

Don't worry that people say it isn't polite. It's a way of helping us reach farther.

Take his finger and point at a familiar object.

Say, "There is the light," while pointing at the lightbulb.

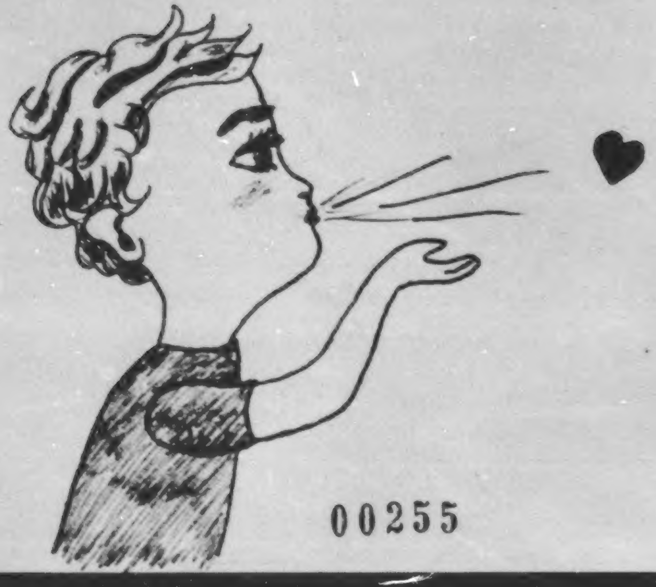
Point and encourage him to look at the object. At first he will look at your hand.



BLOW A KISS

Material--a doll

Teach your child to blow a kiss or to kiss your cheek.



B-E

LOOKING AT PICTURES

Materials--magazines

Read a magazine with your child. Call out words and point to the pictures.

Encourage your child to point to the pictures, too.

Don't scold when magazines get torn.

TRUE CONFESSION
X-RATED!

B-F

READER'S DIGEST

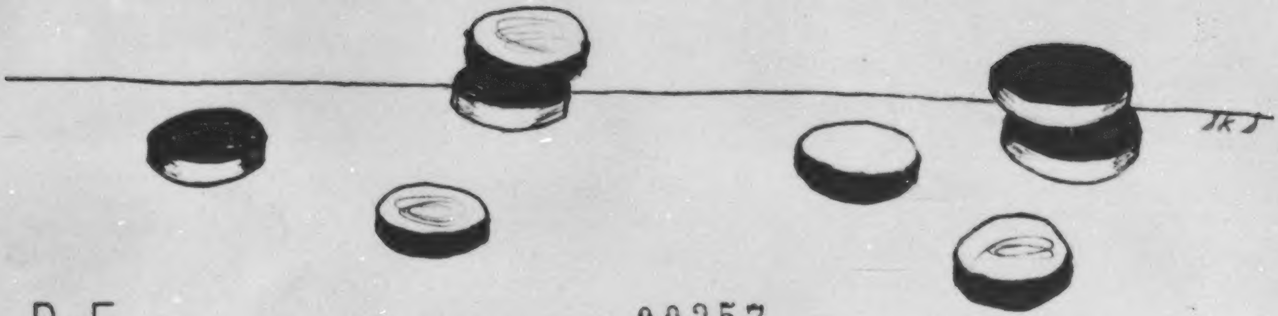
SORTING BY COLOR

Materials--4 black checkers and 4 red checkers

Give your child the 4 black and 4 red checkers.

Encourage him to put the red checkers in one stack and the black checkers in another stack.

Praise him often.



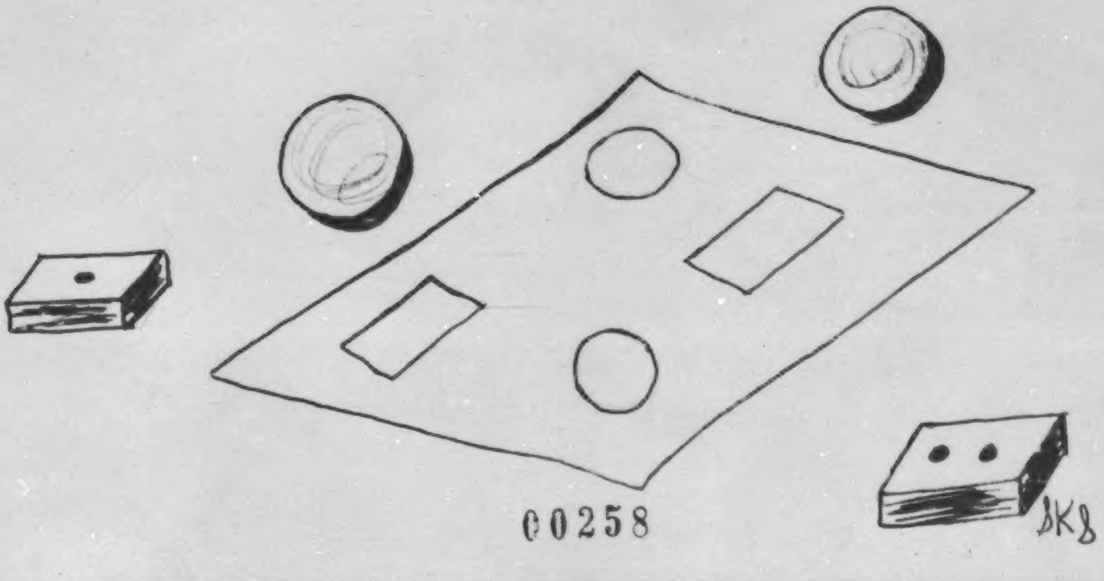
MATCHING BY SHAPE

Materials--2 black dominoes and
2 black checkers

Draw the shapes of the checkers and dominoes onto a piece of cardboard.

Encourage your child to place the checkers and dominoes on the cardboard shapes.

Praise him often.



C-F

REMOVING OBJECT FROM BOTTLE

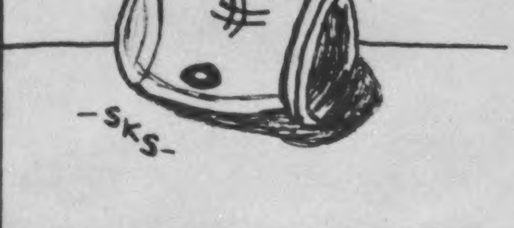
Materials: empty bottle and dry cereal

Give your child a cheerio and a clean, empty baby food jar or plastic baby bottle.

Encourage him to drop a piece of cereal in the bottle and then to tip it out. Say, "Put it in the bottle," "Take it out," or "Get it out."

Then give your child more cheerios to fill the jar.

Let him eat them.



B and C

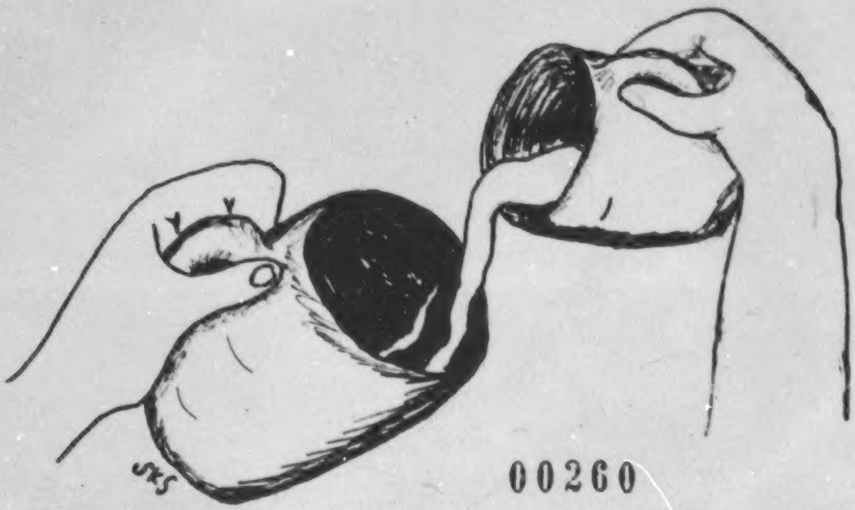
POURING CUPS

Materials--2 measuring cups

Give your child 2 cups while he is in the bathtub. Let him pour water from one cup into the other.

If he pours water from the big cup into the little cup, he will notice the water running over.

He may try to drink from the cup. If so, he will learn that soapy water does not taste good.



C-F

TELEPHONE PLAY

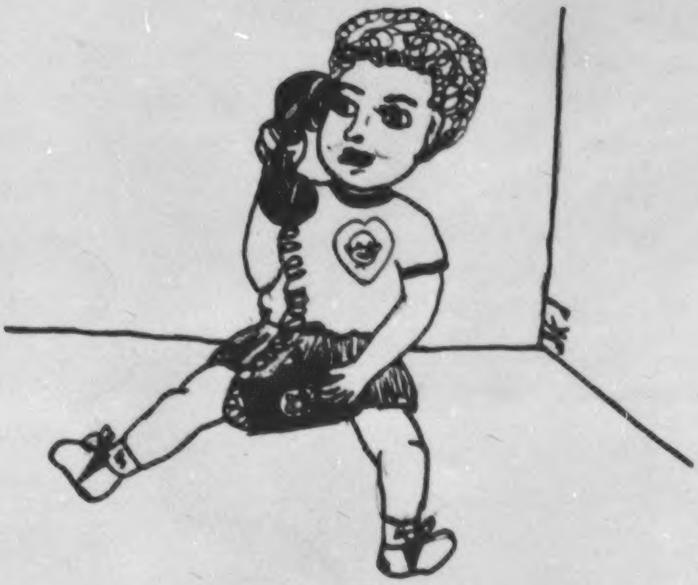
Material--a toy telephone

Hand the toy telephone to child. Say, "Hello."

Answer him.

Talk to your child on the telephone.

Praise him often.



C-E

TELEPHONE PLAY

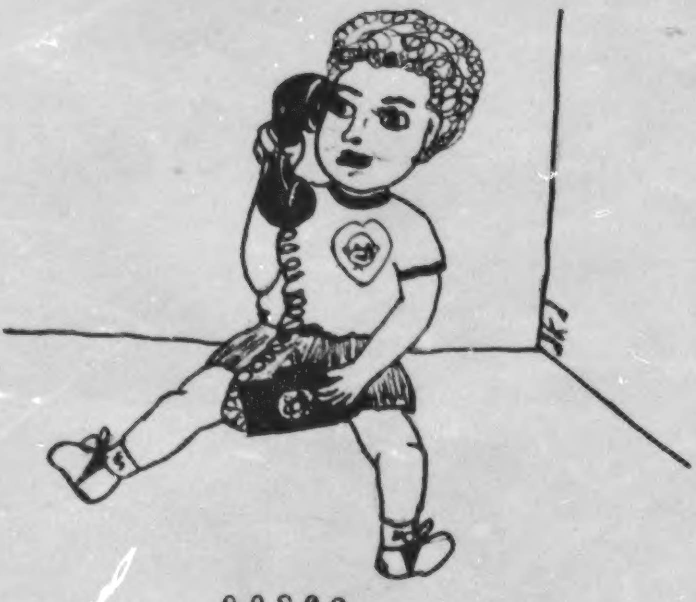
Material--a toy telephone

Hand the toy telephone to child. Say, "Hello."

Answer him.

Talk to your child on the telephone.

Praise him often.



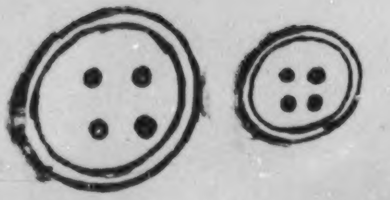
C-E

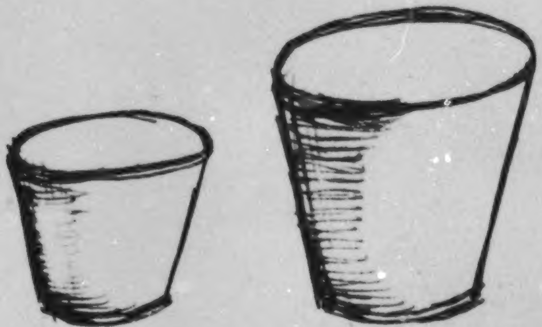
BIG AND LITTLE

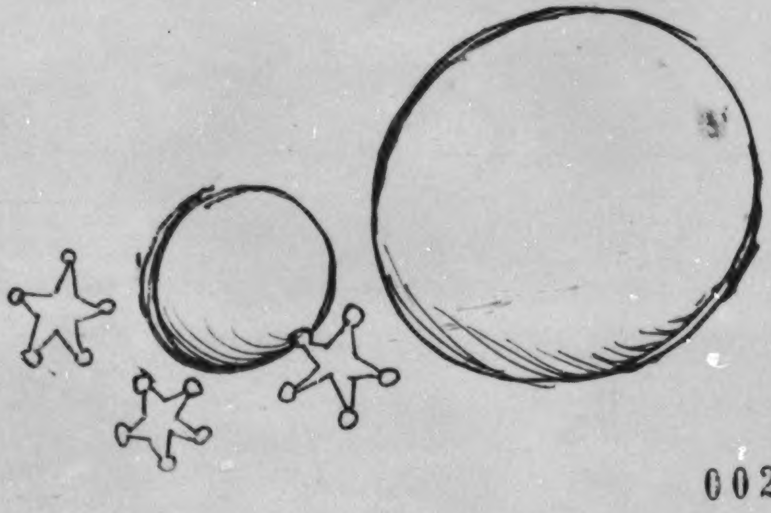
Material: Big and little objects-cups,
paper cut-outs, buttons-sticks.

Show your child one pair of objects at a time and say "Show me the big________."

Do all the big objects, then ask your child to point to the little ones.







DRESS UP

Materials: Save a grocer box for "dress up" clothes. Put old shoes, purse, hat, dresses, etc. in box.

Play "pretend games" with your child.

Let him serve you make-believe coffee or cookies.

Pretend you are at a party or in the kitchen cooking. Make up your own make-believe games.

TABLE ACTIVITIES I

Help your child pour his own milk.

You can practice with him with cups when you are bathing him.

If (or when) he spills, let him help you clean the milk up.

Show him how to throw the soiled napkin in the waste basket.

Make him feel a part of the family.

Praise him often.

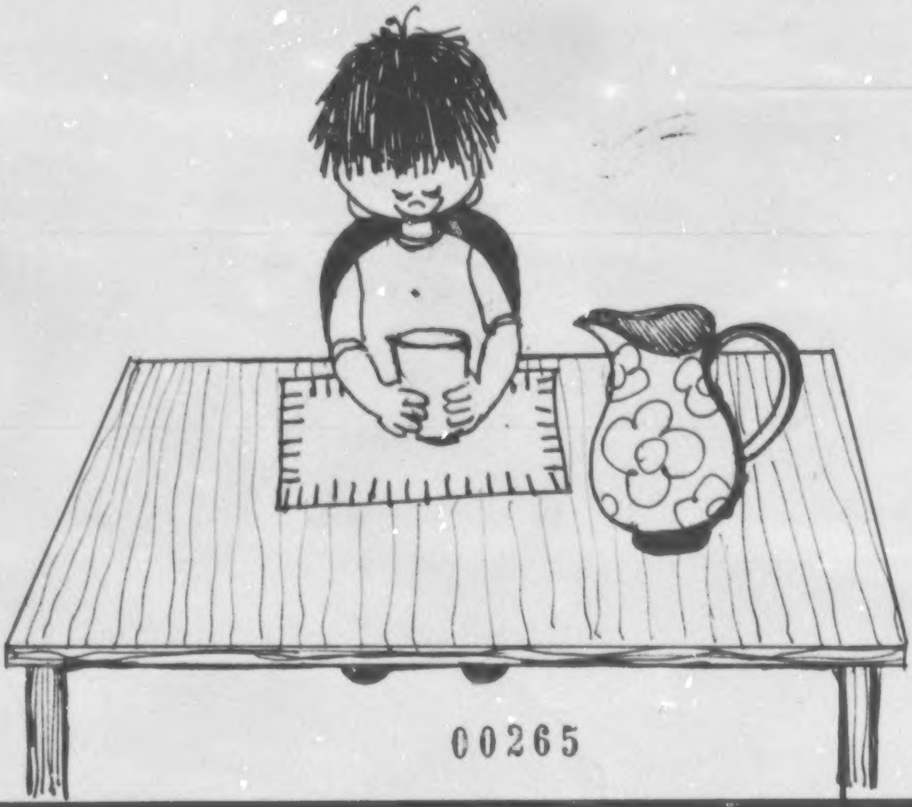
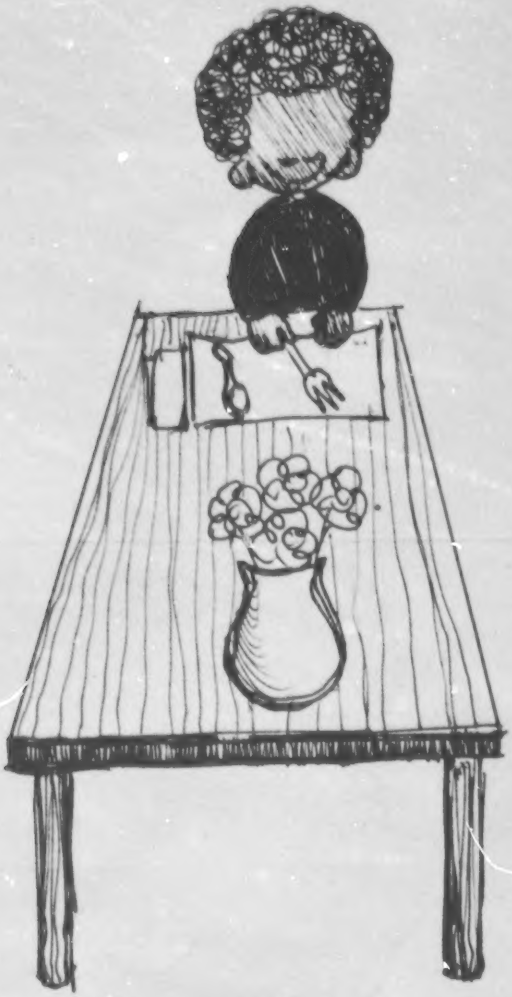


TABLE ACTIVITIES II

Your child can take part in setting the table. He can fold the napkins. He can place the spoons on the table.

May be you could find a pretty leaf or a flower and let him decorate the table. He will like making things look nice.



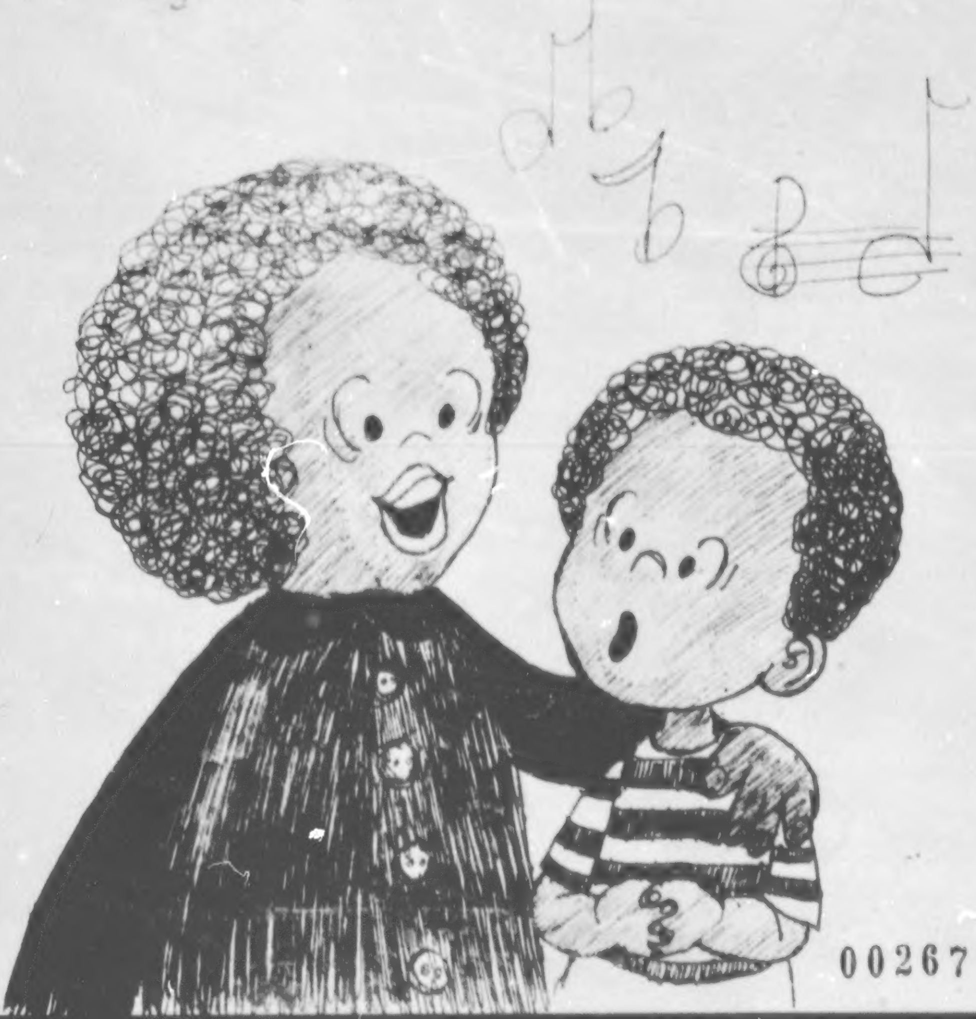
SINGING

Your child likes to be happy and likes to see you happy.

Let him hear you sing when you feel like it.

Encourage him to sing with you.

Maybe you could have a favorite song and sing it together.



SONGS TO LEARN FROM

MATERIALS -- A toy fish; a picture of a turkey.

Sing these songs to the child and show him how to do the appropriate hand movements.

FISH SONG

Fish Song

One two three four five
caught a fish alive
Why did I let him go
Because he bit my finger so
Which one did he bite
The little one on the right.

Turkey Song

I'm a very fine turkey
And I sing a fine song
Gobble, Gobble, Gobble,
I strutt around the barnyard
  all day long
And my head goes
Bobble, Bobble, Bobble

"THE BEEHIVE"

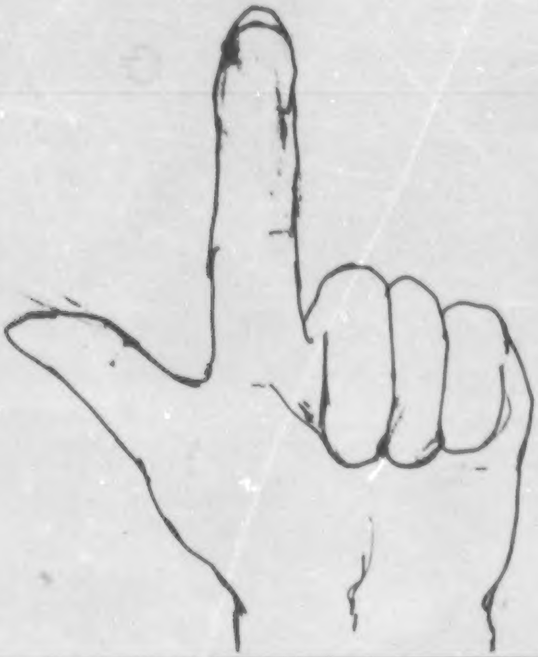
MATERIALS -- You and your child

(Make a fist with your hand. This is a beehive. Bring out a finger as you count each bee. Begin with your thumb.)

Then sing:

"Here is the beehive. Where are all the bees
Hidden away where nobody sees.
Soon they are creeping out of the hive --
One! - two!- three! - four! - five!"

DIRECTIONS -- See if he can play this game.

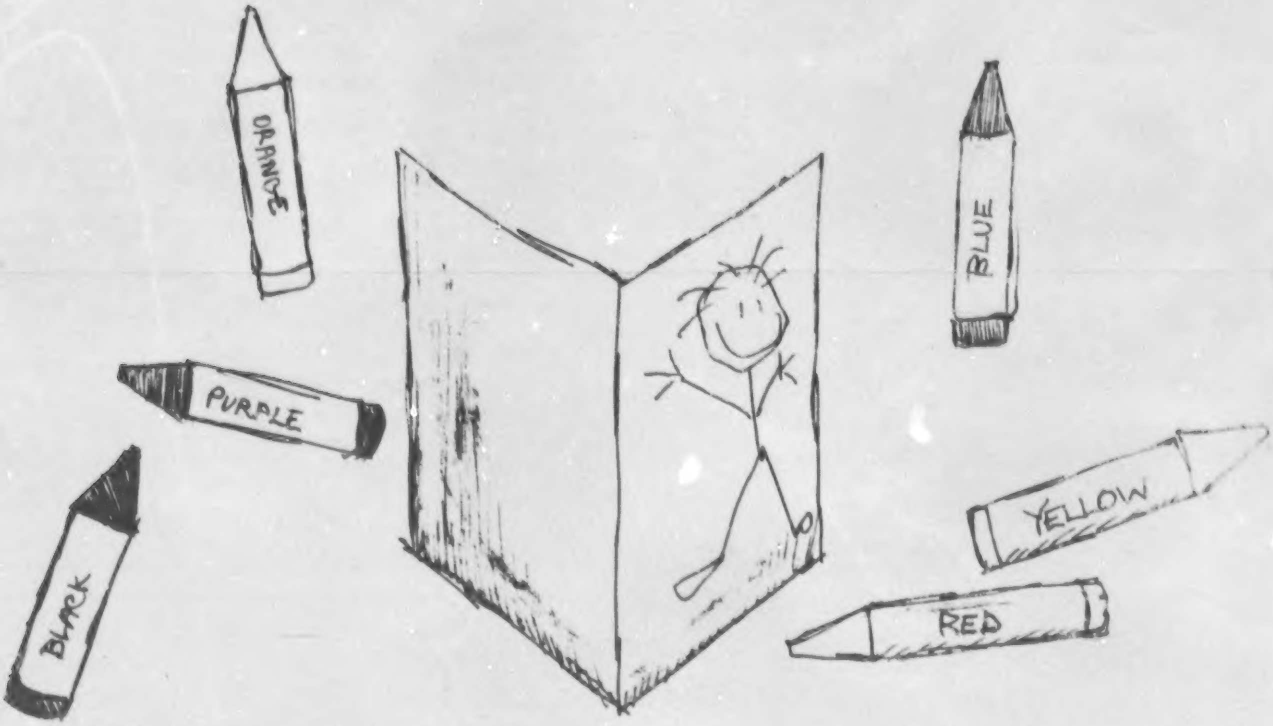


FOLDING PAPERS

MATERIALS -- Half sheet of paper, crayons

Tell your child that you are going to make a book. Fold the paper over and press it down so that it makes a little book.

DIRECTIONS -- See if your child can make a little book this way. Color a picture

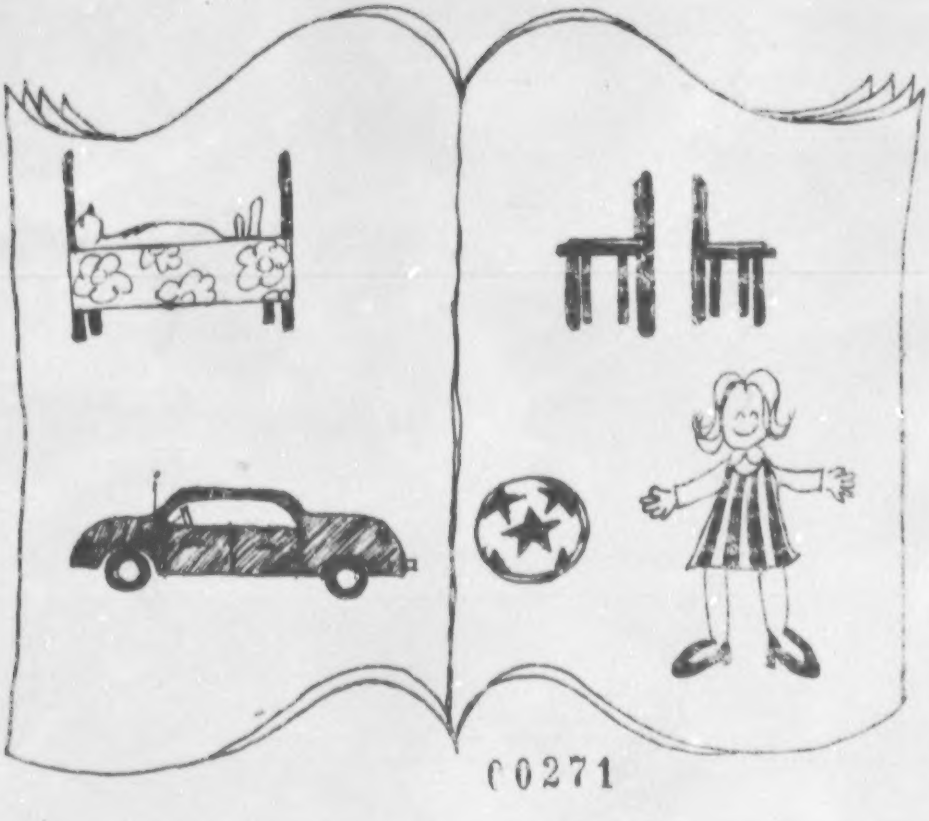

ORANGE
BLUE
PURPLE
YELLOW
BLACK
RED

FAMILAR THINGS

Material: Magazine, Trading Stamp Catalog

Ask your child to point to common objects in the magazine.
Say, "Show me the bed,". ________the lady."
"Can you show me the chair?"________
the car."

See if he will begin to tell you some of the names.



FAMILY NAMES

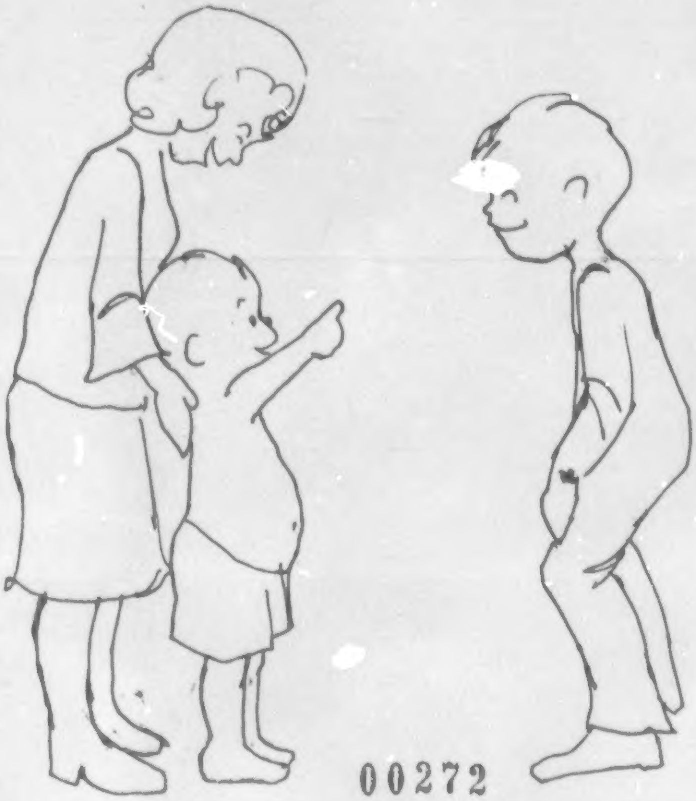
Help your child to learn the names of all of his family.

When you are together as a family walk around the room and point to each person.

As you point, help him to say the name of each person. (Say it first for him.)

Clap for him when he gets the name right.

Make a scrapbook with family pictures in it, maybe.



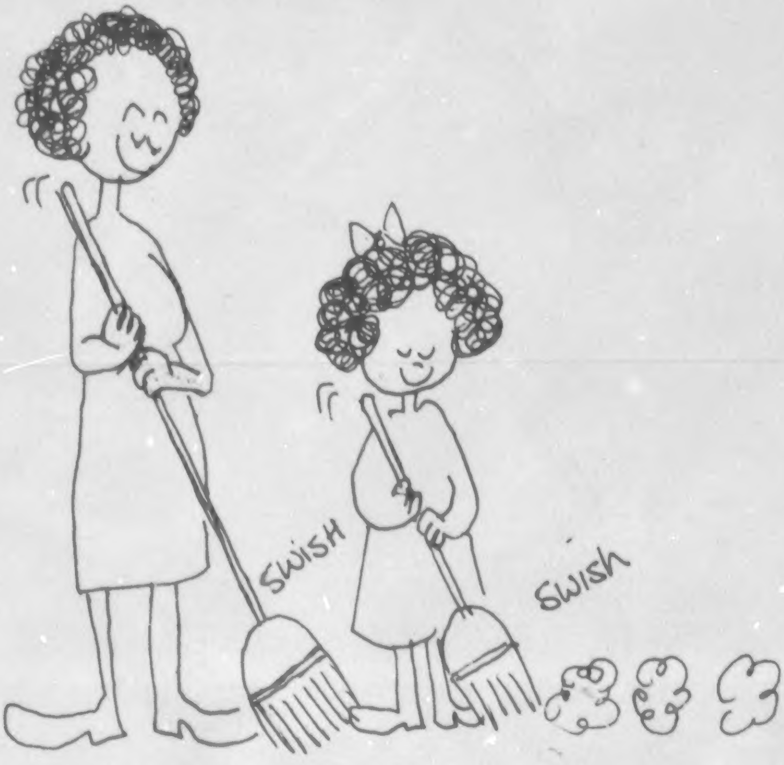
HOUSEHOLD HELP

Your child likes to feel grown-up and helpful.

Take time to include him in your daily activities.

He can "help" you: sweep, dust, polish, and scrub.

Praise him and help him feel he's a good and useful person. This will make him happy.

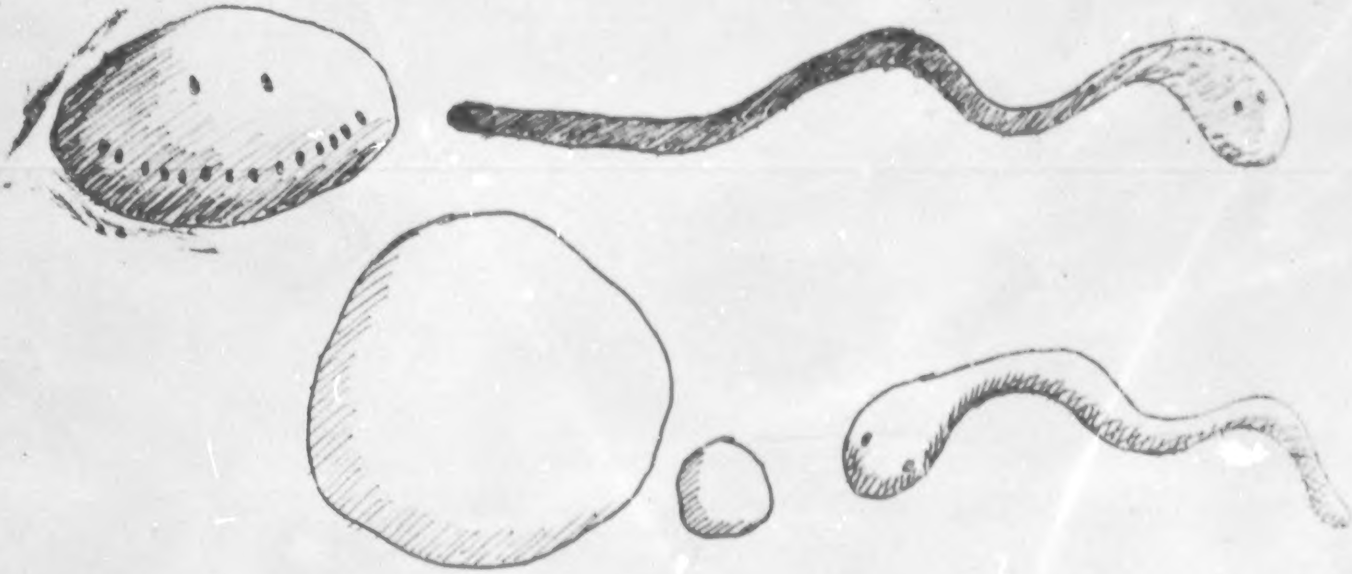


WORKING WITH CLAY

MATERIALS -- Modeling Clay

Show your child how to make a big ball and a little ball; a long snake, a face on the clay, a bowl.

Put 2 of the items such as a big ball and a little ball in front of the child and say "Show me the big ball" etc.



WATCHING TRAFFIC

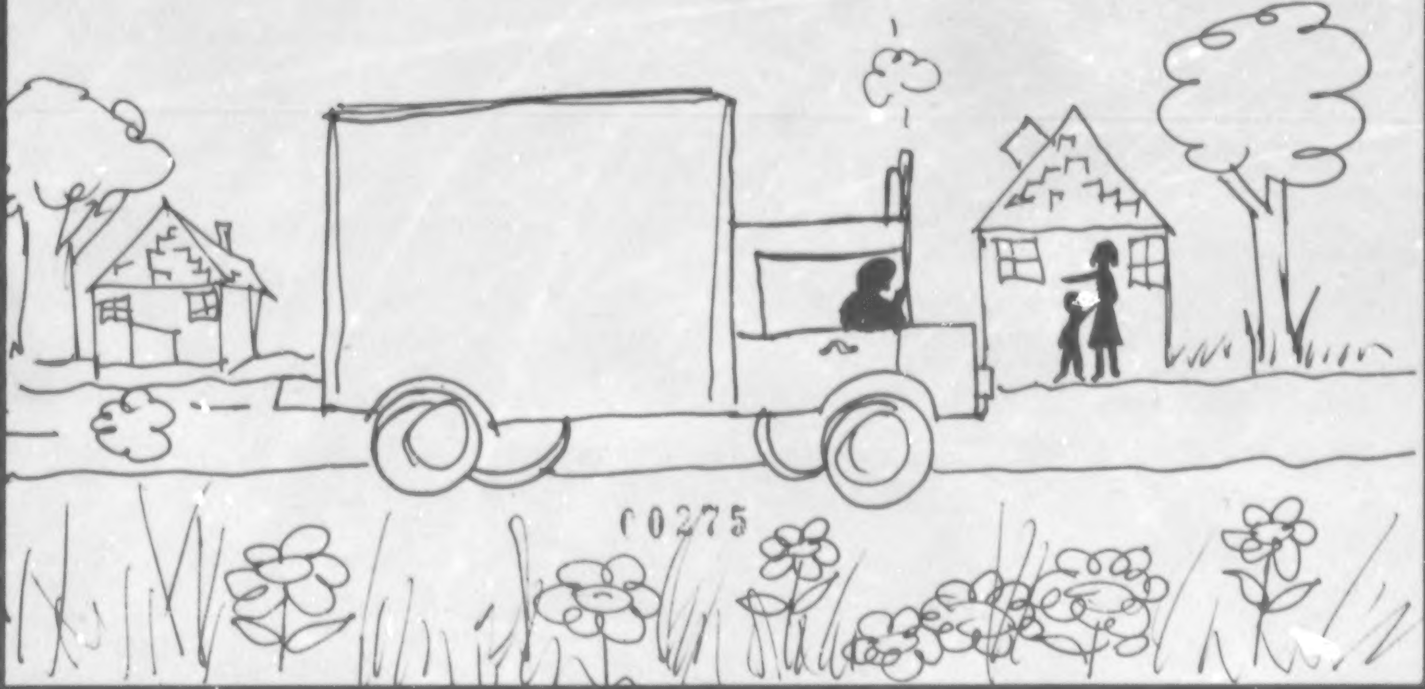
Children like big trucks.

When a dump truck, the garbage truck or a fire truck goes by your house point them out to your child.

Be excited as you name the kind of truck going by___
Call them by name and point.

Soon your child will be showing these things to you.

Other things to point out: Airplanes__
Ambulances__buses__road machinery__



PUPPETS

Save an old sock.

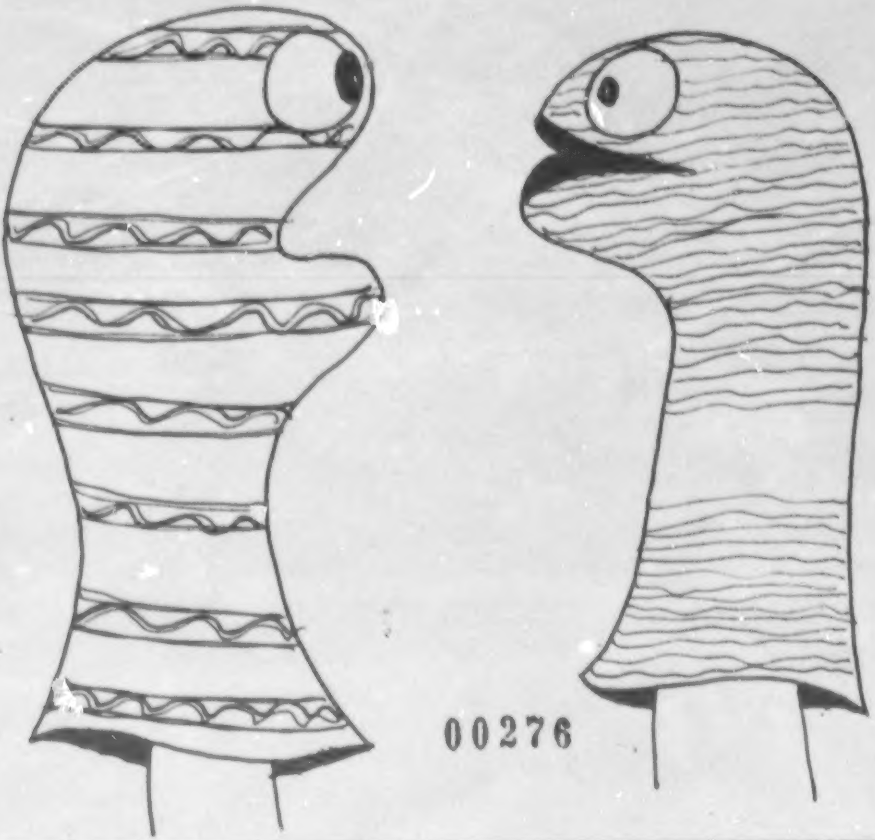
Draw a face on it with a magic marker or a felt tip pen.

Let the "doll" dance and talk.

Answer the "doll" back.

Encourage your child to put the sock on the doll.

Help him make the doll talk.



E-F

SONGS TO LEARN FROM

MATERIALS -- Small train

Sing these songs to your child and help him make the appropriate hand movements.

Clap Your Hands

Clap Clap Clap your hands
Clap your hands together
Clap Clap Clap your hands
Clap your hands together

(Shake your hands; rub your tummy; pat your head, stamp your feet; wink your eyes, etc., etc.)

The "Train"

(Hold out arm)

Little train goes up the track
Woo-oo-oo
And then he comes back

BATH TUB PLAY

Material: A sponge

Let your child explore all the fun of a sponge.

Show him how to squeeze the sponge to fill it with water.

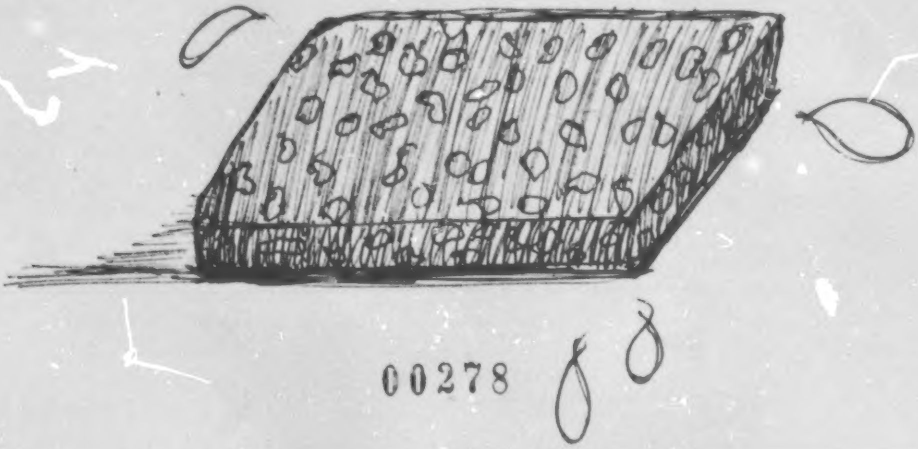
Let him squeeze the water filled sponge into a plastic cup......

Put soap on the sponge and "wash" the tub.

Scrub his feet and knees.

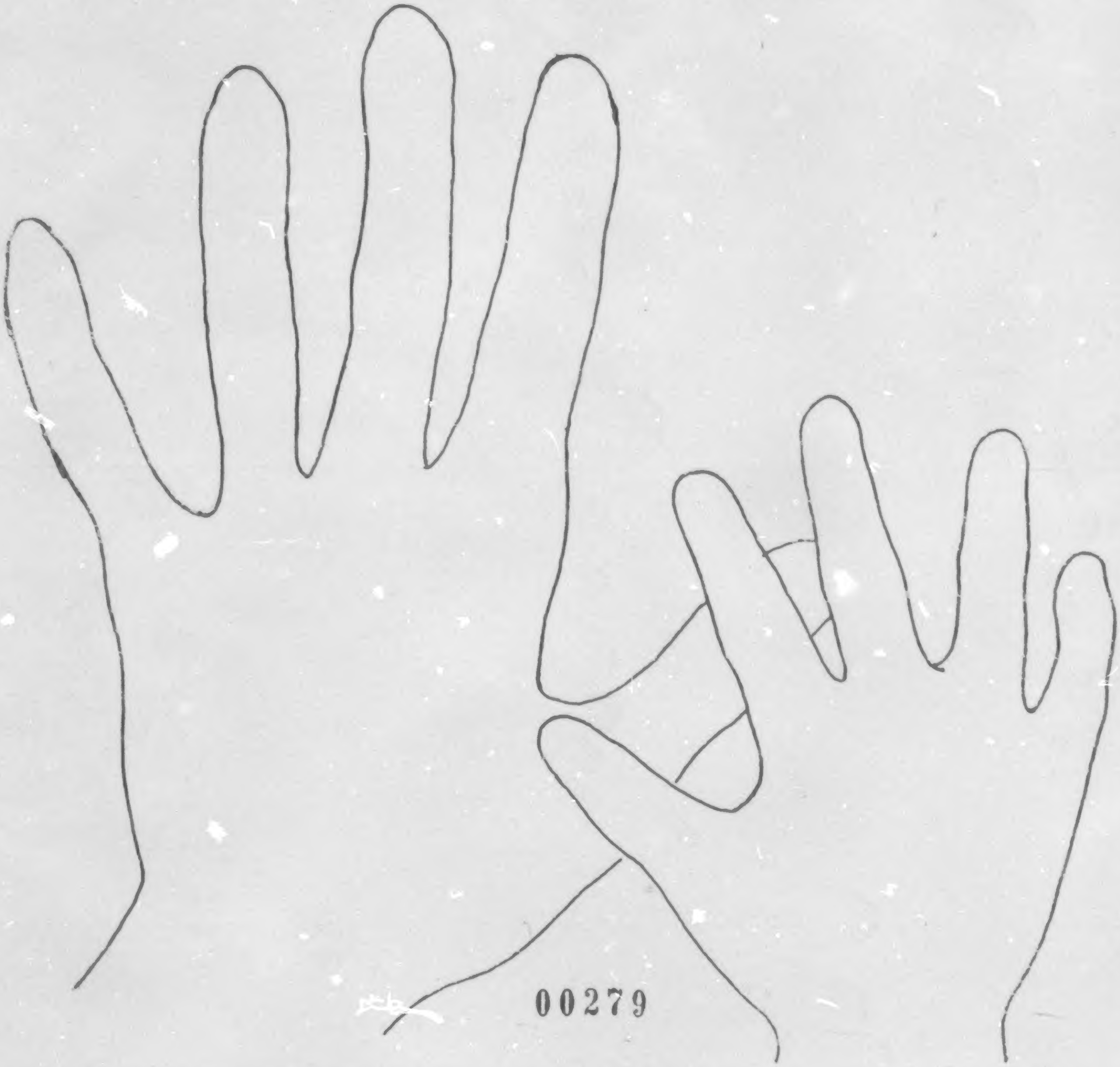
Sponges have many uses.

Make up some "games" of your own.



DRAWING

Materials: Put your hand down on paper and trace around it. Then do the same with your child's hand. Say "mine is big yours is little." Draw fingernails on the hands. . . and a ring too. Talk about fingers and help your child fit his real hand on the drawn hand.

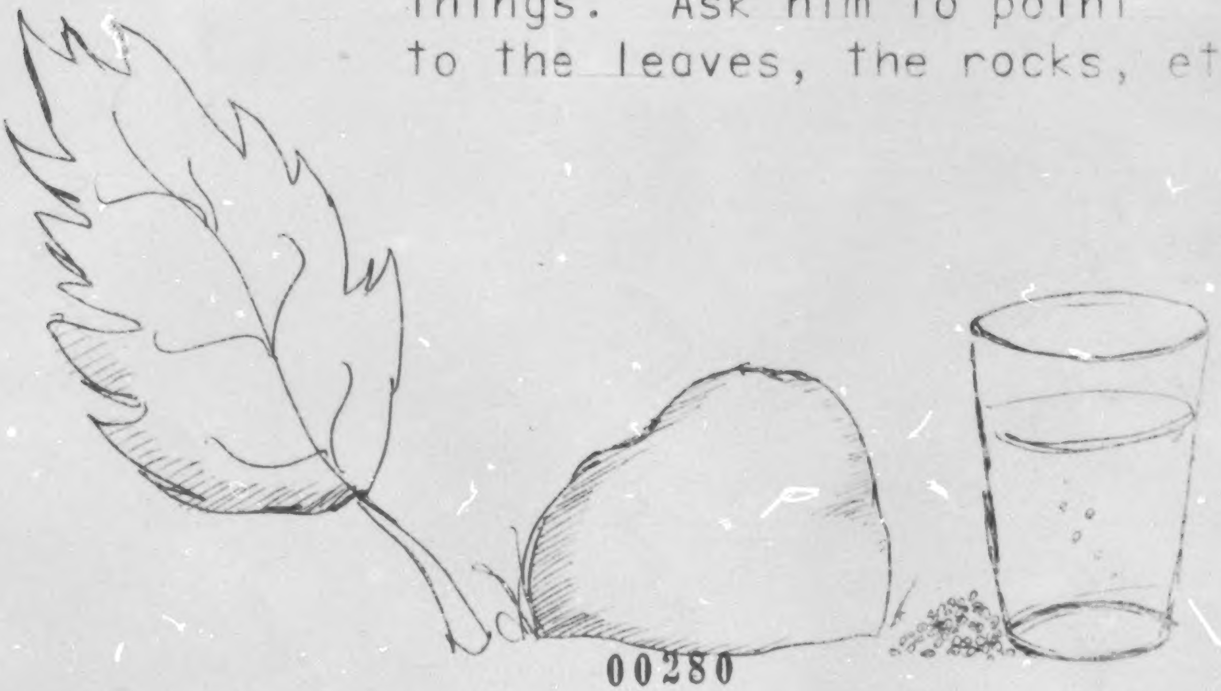


DISTINGUISHING AMONG OBJECTS

MATERIALS -- Things of different textures: weeds, leaves, rocks, mud, sand, sticks, pine cones, water, etc.

Present the objects to the baby, one at a time. Tell him what they are. When baby tires of one object, give him another.

DIRECTIONS -- See if he can learn to distinguish among these things. Ask him to point to the leaves, the rocks, etc.



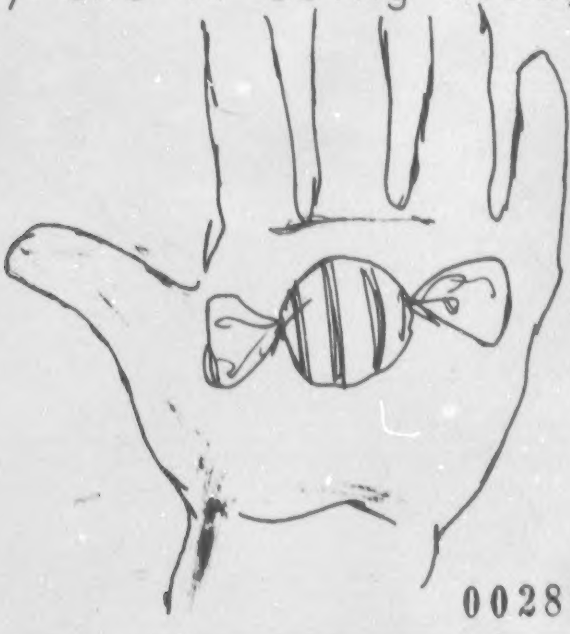
UNDERSTANDING "YES" AND "NO" RESPONSES

MATERIAL -- Small object or food

Show child the object and transfer it back and forth between your hands several times.

Present both hands and say, "Which hand is it in?"

When the child reaches for one of your hands, say either -
(a) "No, no, no. It's not in this hand." Immediately open your hand. "This hand is empty." "Where is it?" or
(b) "Yes, It is in this hand." open hand immediately and if using food, let him eat it.

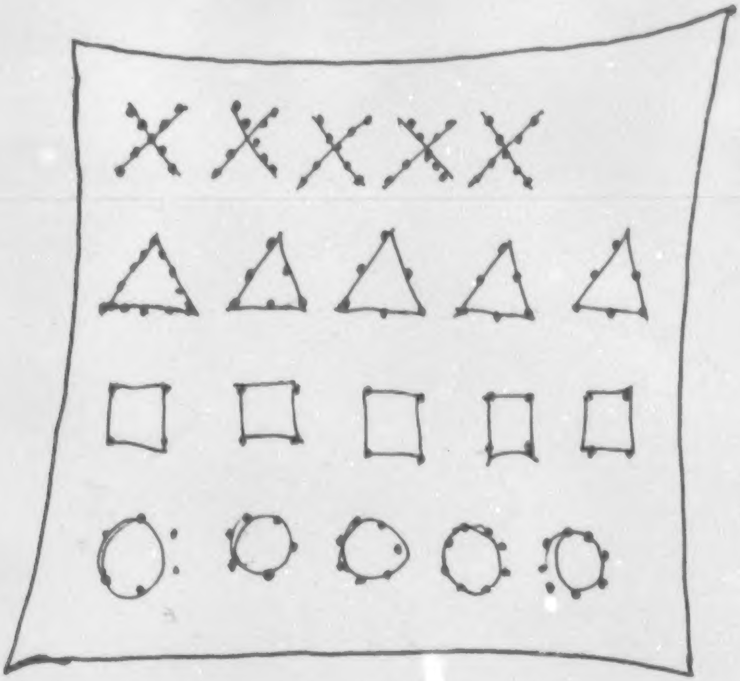


DRAWING SHAPES I

Materials: Crayon, Paper with dotted lines
5----X's
5----Triangles
5----Squares
5----Circles

Take the X first and let your child watch you connect the dots. Give him another and help him do it.

Continue with the other shapes. You may have to make more papers for him.

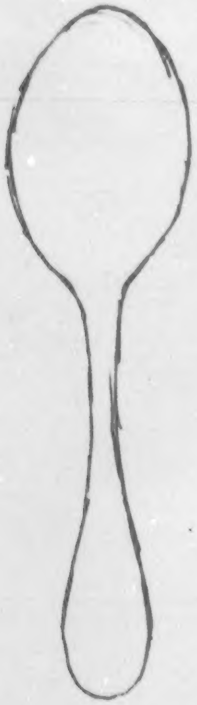


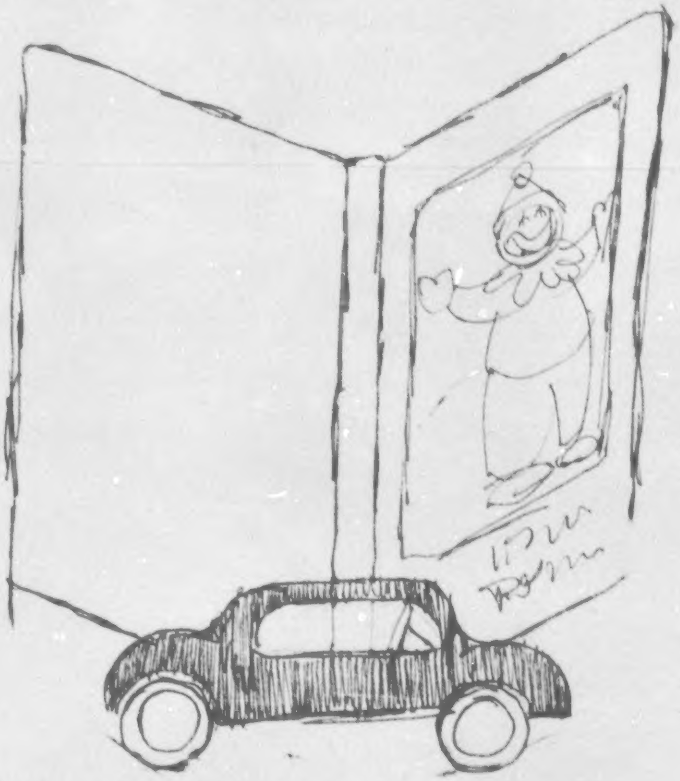
SHOW ME I

Materials: 10 common household objects, such as: spoon, comb, toothbrush, book, shoe, cup, cookie, toy car, napkin.

Tell your child the name of each object. Place various combinations of these objects in front of your child, and ask him to point to one of them.

Show him (the cookie, soap and toothbrush) an and say, "Point to the soap", "Point to the cookie" etc.



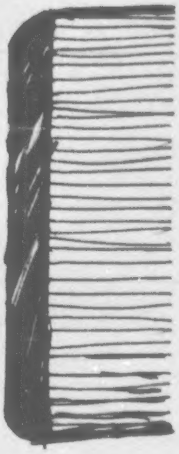


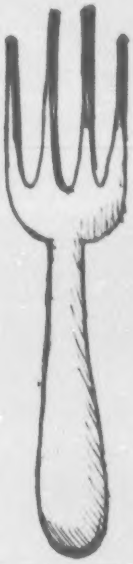
SHOW ME II

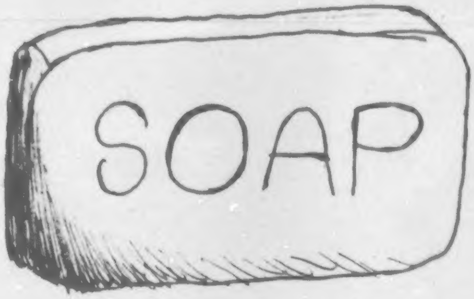
Materials: 10 common household objects

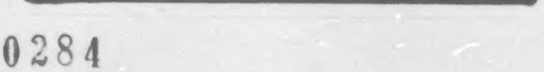
Show your child a set of 3 objects, such as soap, fork, comb and tell him to "point to the one we can eat with","take a bath with". Repeat with various combinations of objects.

Later, you can group all 10 objects together and see if your child can find the one you are talking about.







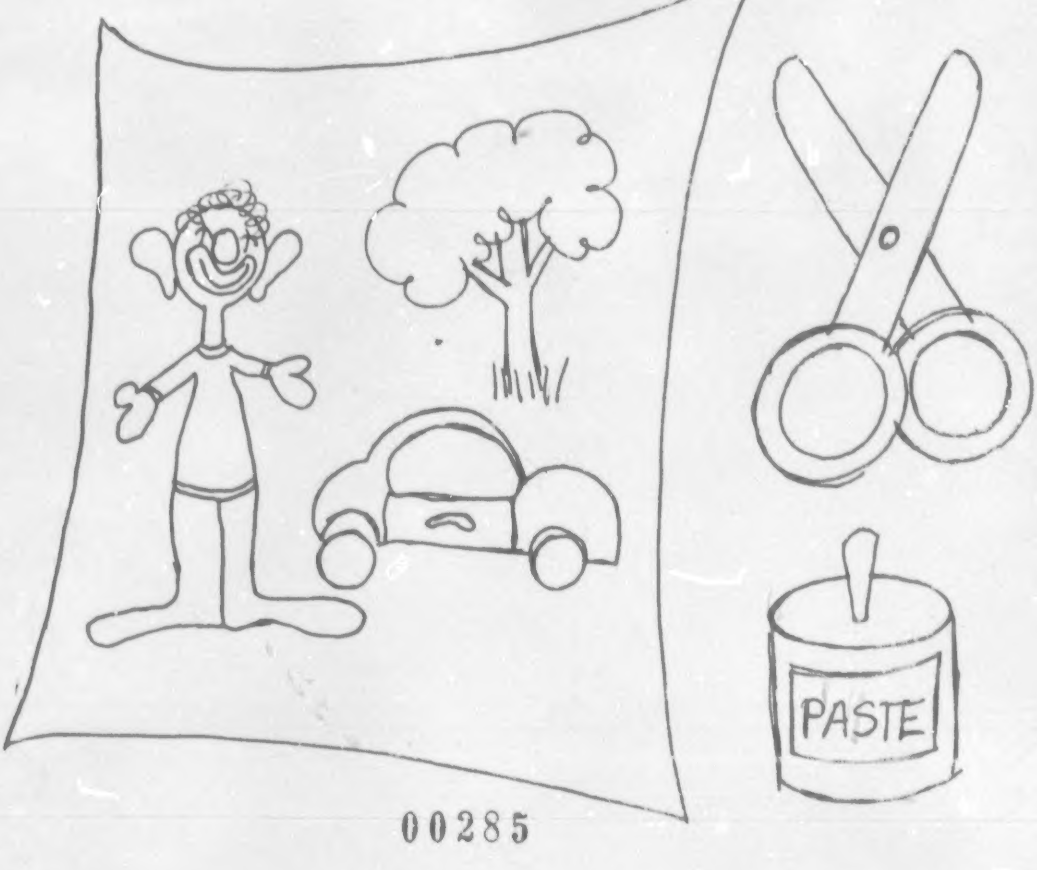


FAMILIAR THINGS

Material: Magazines and sheets of stiff paper.

Cut out common objects, people, etc. Paste two on each page of blank paper. Make several.

Procedure: Tell your child what each item is. Let him name each item. Later, show him each page and say "Point to the man. . Point to to the car" etc.



"RING AROUND THE ROSEY"

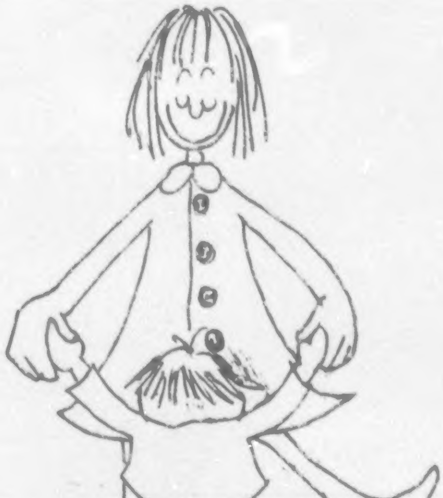
MATERIALS -- You and your child

Hold hands with your child and walk around in a circle while you sing "Ring around the rosey".

The song goes:

"Ring around the rosey.
Pocket full of posey,
Ashes, Ashes all fall down."

Change the rhythm of the song so child doesn't know when you are going to say all fall down.



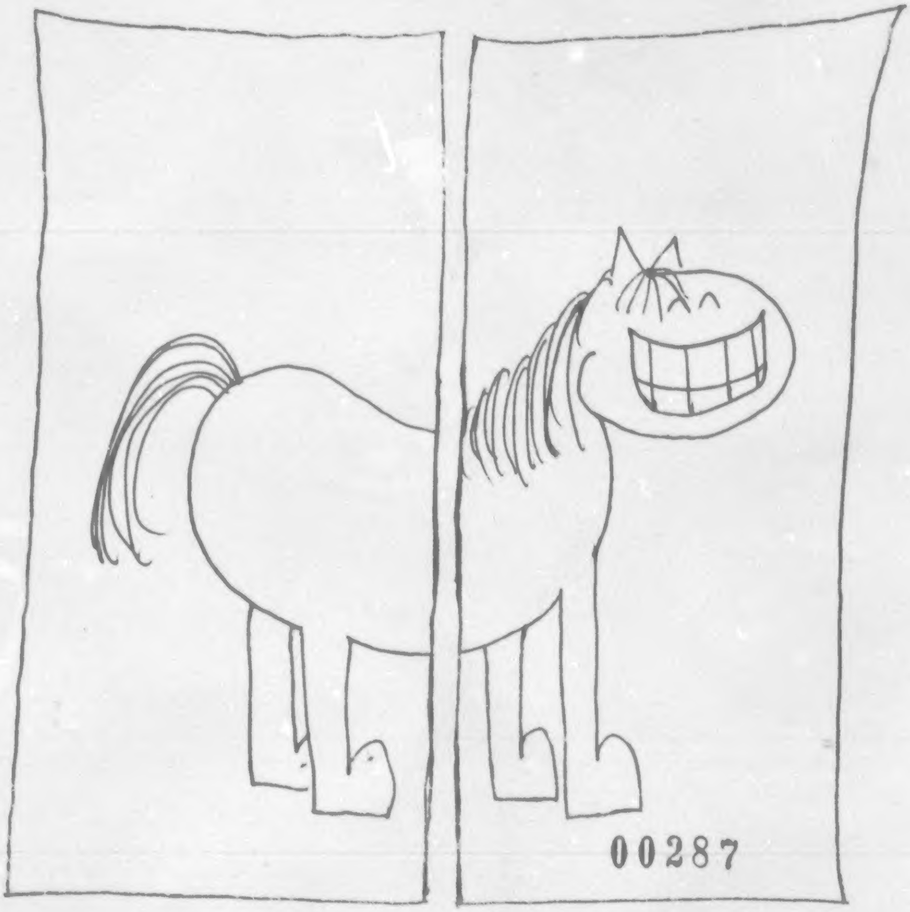
PUZZLES

Glue a picture onto a piece of shirt cardboard.

Cut the picture into 2 pieces.

Help your child fit the pieces together.

Later cut these 2 pieces again(to make 4 pieces)
Help your child fit the 4 pieces together.

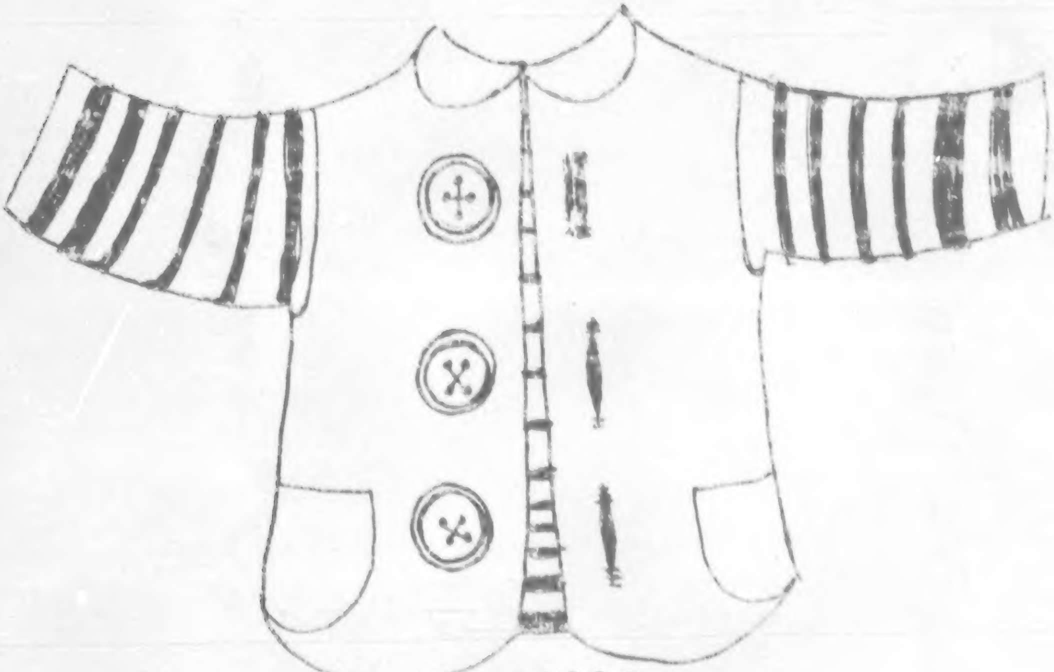


BUTTONING

MATERIALS -- Button on material and buttonhole.

Show your child how to button and unbutton describing what you're doing.

DIRECTIONS -- See if he can button when asked, and unbutton when asked.



APPENDIX J

The effects of a supplementary language program on the linguistic performance of preschool disadvantaged children.

Richard Elardo and Bettye M. Caldwell

The purpose of this study was to assess whether, in a well-planned, structured preschool classroom, any increment in children's language performance would result from the addition of a formal language development kit. The kit chosen for this added training was the Engelmann, Osborn, and Engelmann (1969) DISTAR language program.

It has been the opinion of many linguists (Menyuk, 1971; Houston, 1970; McNeill, 1970; Chomsky, 1965) that mere exposure to the language in a stimulating environment (such as a preschool classroom) is sufficient fodder for the child's innate linguistic capacities to grow and develop. They feel that children, by the age of five, have already acquired most of the basic syntactic structures of their language, in the absence of direct instruction. Miller (1964) stated for example, that children acquire language from parents who have no idea of how to explain it to them; and noted that no careful schedule of rewards for correct utterances or punishments for incorrect utterances is necessary. Similarly, the linguist Susan Houston recently offered the opinion that "...language acquisition is not a skill--neither is it the acquisition of a skill--and so does not depend upon environmental exigencies, save in that children must hear a language in order to learn it" p. 959.

On the other hand, behavioristic psychologists such as Bereiter and Engelmann (1966) believe that the language problems of the disadvantaged child constitute a fundamental deficit and are not merely a function of shyness or unfamiliarity with school settings. Consequently, specific language concepts are sequenced and incorporated into a structured language development program which is sometimes characterized as a "pressure-cooker for young minds".

This study was designed in an attempt to uncover differences in language performance among a group of children, from a stimulating classroom, who received additional stimulation in the form of the DISTAR language program.

Method

Subjects. Subjects were eighteen children enrolled in the four-year-old classroom at the Center for Early Development and Education.

Experimental Design. The group was ranked from highest to lowest in terms of score earned on the Stanford-Binet. Every other child was then assigned to either the experimental or the control group.

In an attempt to control for teacher variables, the two co-teachers in the room took turns teaching the experimental group. The two teachers rotated every month.

Procedure. Children in the experimental group were taken each day to a small room for instruction. Over a period of approximately seven months, the experimental children progressed through the 180 planned lessons of the Distar language program.

Results

Dependent measures employed at the termination of training were: The Stanford-Binet, the Engelmann Basic Concept Inventory, a language complexity score derived from performance on a story-retelling task, and the Illinois Test of Psycholinguistic Abilities. At the end of the school year, t - tests between experimental and control groups revealed no significant differences (Binet: $t = 1.44$, 16df, $p > .05$; Engelmann: $t = 1.20$, 17df, $p > .05$; Language Complexity: $t = 1.09$, 17df, $p > .05$; ITPA: $t = 1.10$, 17df, $p > .05$).

Discussion

The results of this study offer some support for those linguists and educators who have maintained that a well-organized and carefully planned preschool program is likely to provide sufficient language input to its children. Children in the control group did as well as those who were exposed to the DISTAR language kit on several measures, even on the Basic Concept Inventory designed by Engelmann himself. These results indicate to us that when teachers are aware of what concepts to stress, these concepts can be taught in a less formal and didactic manner than is the case with the DISTAR program.

Of course, teachers who are unsure of what concepts to stress in an early childhood program would probably benefit from a packaged kit such as the one tested in this study.

References

Bereiter, C. and Engelmann, S. Teaching disadvantaged children in the preschool. Englewood Cliffs, N. J.: Prentice-Hall, 1966.

Chomsky, N. Aspects of the theory of syntax. Cambridge, Mass.: M. I. T. Press, 1965.

Engelmann, S., Osborn, J. and Engelmann, T. The DISTAR language program. Chicago: Science Research Associates, 1969.

McNeill, D. The Acquisition of Language. University of Chicago, 1970.

Menyuk, P. The acquisition and development of language. New Jersey: Prentice- Hall Inc., 1971.

Miller, G. A. The psycholinguists: On the new scientists of language. Encounter, 1964, 23, 29-37.

APPENDIX K

VALUE CONFLICT IN INTERVENTION RESEARCH:
FACT OR FANCY?

Richard Elardo and Bettye M. Caldwell

University of Arkansas

Report

Considerable controversy in present-day intervention research revolves around the question of whether lower-class parents value the same achievements in their young children as do the presumably middle-class personnel who operate intervention programs. It is the fear of some that perhaps program operators are imposing their own values on children, rather than those the children's parents would desire to inculcate. As Susan Gray (1971) explained, the usual accusation is that interveners are promoting a white middle-class model of what is appropriate behavior when dealing with other ethnic groups. Allegations to this effect are sufficiently frequent that persons offering early intervention programs are often made to feel guilty about intruding into the lives of the children and families enrolled in their programs, rather than to feel gratified at having performed a service to the children, the families, and to the larger society.

The position that value conflicts exist between the middle and lower classes is not without empirical support. In the plethora of literature dealing with social class there is ample evidence of differences in child rearing practices and in parent attitudes and values associated with social class status. For example, Kohn (1959a, 1959b) found that lower-class families were concerned with rearing children who would be compliant with external authority, whereas middle-class families valued the development of internalized control. Differences were also noted in the extent to which fathers were expected to participate in the child rearing process, with lower-class fathers essentially abrogating such responsibility. Additional support for the value conflict hypothesis may be drawn from Riessman (1962), who characterized the middle-class family as being child-centered, future-oriented, and interested in achievement and mobility. Riessman characterized the lower-class family as adult-centered, present-oriented, and interested in enjoying life with extended family and peers.

Contrary to the assertions of Kohn and Riessman, an implicit assumption encountered at the dawn of the Head Start era in 1965 was that lower-class parents wanted the same things for their children that other parents wanted--the opportunity to develop those cognitive skills and behavior traits that would be conducive to success in school and later success in society at large. Medinnus' (1970) study of a group of Head Start parents offered some empirical corroboration for the above notion. He found that mothers of children enrolled in a California Head Start program cited as goals for their children behaviors that are adaptive for school performance--getting along with age mates, doing things independently, learning how to mind adults, and understanding language and number concepts. There is no suggestion in Medinnus' data that parental goals and values differed from those likely to be espoused by the teachers and directors of Head Start programs, or by middle-class parents in general.

The issue of inter-class value conflict is by no means resolved. For example, Sroufe (1971) has asked if intervention programs have the right to impose middle-class standards on lower-class and black families; and Hess (1971) indicated that many groups in our culture today believe that the present educational system at the preschool level is designed to transmit cultural patterns of the dominant middle-class society. A contrasting position was taken by Bee, Streissguth, Van Egeren, Leckie and Nyman (1971) who asserted that perhaps there is far less disagreement between middle-and lower-class values with regard to education than has been alleged, particularly values with regard to education than has been alleged, particularly regarding a basic core of valued competencies. They argue that communication skills, reading, writing, and speaking clearly and persuasively, appear to be highly valued in both black and white communities among both middle-and lower-class groups.

If there is indeed dissonance between parents and professionals as to the appropriate goals for an early intervention program, there will be additional problems which probably will further complicate the coping task required of children enrolled in the program. Dissonance might also arise between paraprofessionals and professionals. That is, most early childhood education programs are partially staffed by teacher aides who are more likely to share a social class background with parents than with professionals. Accordingly, the present study was designed to investigate these two questions:

1. Do parents share the same behavioral objectives for their children as do the persons who planned the child development program in which their children are enrolled?

2. Do paraprofessionals working in child development centers share the same behavioral objectives for children as the parents and the professional staff?

Method

Fifty-four items were randomly selected from a list of 265 developmental objectives used to guide teaching activities at the Center for Early Development and Education. Represented in the total list of objectives were the areas of personal-social attributes, communication skills, motor skills, cognitive skills, p[illegible]tual skills, expressiveness and creativity, assumption of responsibility, a[illegible]ssession of culturally relevant knowledge. Here are several examples of th[illegible] items:

While in school, I think children 3 to 6 should learn to:
Change from one activity to another when requested by the teacher.
Ask "Why" questions, such as, "Why is it raining?" and "Why does
  a wagon have wheels?"
Correctly use words such as smooth, round, and scratchy.
Play safely on swings and jungle gym equipment.
Name the days of the week.

This list of 54 objectives was interspersed with 21 additional "ringer" items representing behaviors not likely to be considered objectives in middle-class intervention programs. Examples of these items are:

> While in school I think children 3 to 5 years of age should learn to:
> Do what they want to do instead of following directions.
> Refuse to do what adults say.
> Tease their classmates.
> Reject the teacher's suggestions.
> Keep silent about their feelings and emotions and not discuss them with the teacher.

The above items were added to the list to make certain that any obtained agreements among staff, parents, and program objectives would not merely represent an acquiescence set. The 75-item interview form which resulted was presented as an opinion survey with the following instructions given to all persons:

> I would like to have your opinions of the objectives that a kindergarten or nursery school might have for its children. I will read a list of possible objectives and for each one, I would like for you to answer 'yes,' 'no,' or 'not sure,' depending on whether or not you think the objective is a good one. For example, if one goal is 'Children should have fun in school' and you think that they should, then you would answer 'Yes.' If you think that they should not, then, you would answer 'No.' Feel free to make any additional comments about the items.

The interview was administered to 44 parents with preschool children enrolled in inner-city intervention programs; to 27 teachers and to 37 teacher aides involved in these programs. All subjects resided in the vicinity of Little Rock, Arkansas.

Results

The data contained in Table 1 represent the degree of agreement between parents, teachers, teacher aides, and program objectives. Since practically no interviewees chose the category "Not sure" as a response, it was not included in the analysis of results.

TABLE 1

Per cent of each group answering "Yes"

to regular items and "No" to ringers.

	REGULAR ITEMS (% answering "Yes")	RINGERS (% answering "No")
PARENTS	95	85
TEACHERS	90	86
AIDES	89	84

Chi square analyses were run on items to test for agreement with program objectives between (a) parents and teachers and (b) teachers and aides. A significant chi square would indicate that the two comparison groups held different opinions about an item. No such significant chi squares were found between teachers and aides. However, as can be seen in Table 2, there were six items on which parents disagreed with teachers.

TABLE 2

Disagreements Between Parents and Teachers

		While in school I think children 3 to 6 years of age should learn to:
	#13)	Watch a ½ hour children's television program. ($X^2 = 6.8$, 1 df, $p < .01$)
	#51)	Repeat numbers in or out of order when asked, such as 14902, 27654, etc. ($X^2 = 7.0$, 1 df, $p < .01$)
REGULAR ITEMS	#52)	Ignore unimportant aspects of problems (won't ask color of apples when asked to add 2+2 apples). $X^2 = 7.1$, 1df, $p < .01$)
	#57)	Copy a color used by the teachers when asked "Children, let's use red like this." ($X^2 = 6.7$, 1 df, $p < .01$)
RINGERS	#36)	Reject the teacher's suggestions. $X^2 = 6.7$, 1 df, $p < .01$)
	#43)	Be aggressive and fight at school, so others won't think they are sissies or cowards. ($X^2 = 4.6$, 1 df, $p < .05$)

With respect to the data presented in Table 2, it was interesting to note that on each of the four significant differences on the regular items, disagreement was in the direction of parental acceptance of the objective, indicating concordance between parents and the school (in the abstract) and discordance between teachers and the randomly selected examples of program objectives. Regarding the two significant disagreements on the 'ringer' items, the teachers' rejection of Number 36 is compatible with teacher respect for individual autonomy so often found in professionally trained teachers of young children. Similarly, parental rejection of Number 43 may reflect a subcultural value assigned to self-defense. However, failure to find a significant difference between teachers and aides on these items suggests that they may simply represent chance disproportions of a large number of significance tests. Also included on the questionaire was an open-ended item on which parents were asked whether there were other important things that, in their opinion, a three-to-six-year-old child should learn at school. Less than one-fifth of each group responded to this question. In all three groups questioned, the suggestions offered were nearly evenly divided between cognitive and social-emotional objectives, with no striking differences noted among groups.

Discussion

The main question addressed in this study is the extent to which the goals and values of intervention programs are consonant with the goals and values of parents of children served by those programs. The usual accusation that interveners are promoting a white middle-class model of what is appropriate behavior--in blatant disregard of the fact that parents so not desire such behaviors in their children--is not borne out by our data. These data suggest that such conflict occurs less often than is implied. Although our sample of subjects was limited to one geographic area, our experience with parents in other parts of the country would tend to bear out these local results. At least in our data we find reassurance in concluding that parents, teachers, and aides participating in our own and in similar intervention projects in the Little Rock area for the most part share the same objectives and goals for their children as do the people who plan the intervention programs. Items on which disagreement occurred can be interpreted as indicating that teachers show a slight preference for a greater degree of creativity and flexibility of response in children than do the children's parents. Parents in general were even more accepting of program objectives than were teachers working in the programs.

Finding a high proportion of subjects responding in the same way to our interview indicates to us that there is far more consonance than dissonance among all concerned. This study offers no support to charges that behavior which is not valued by parents is being inculcated in young children in intervention programs

References

Bee, H. L., Streissguth, A., Van Egeren, L. F., Leckie, M. S., Nyman, B. A. Deficits and value judgments: A comment on Sroufe's critique. Developmental Psychology, 1970, 2, 146-149.

Gray, S. W. Ethical issue in research in early childhood intervention. Children, 1971, 18, 83-89.

Hess, R. D., Beckum, L., Knowles, R. T., and Miller, R. Parent training programs and community involvement in day care. In E. H. Grotberg (Ed.), Day Care: Resources for Decisions. Washington, D. C.: Office of Economic Opportunity, 1971, 299-311.

Kohn, M. L. Social class and parental values. American Journal of Sociology, 1959 (a), 64, 337-351.

Kohn, M. L. Social class and the exercise of parental authority. American Sociological Review, 1959 (b), 24, 352-366.

Medinnus, G. R. Head Start: An examination of issues. In G. R. Medinnus and R. C. Johnson (Eds.), Child and Adolescent Psychology: A Book of Readings. New York: Wiley, 1970, 411-421.

Riessman, F. The culturally deprived child. New York: Harper and Row, 1962.

Sroufe, L. A. A methodological and philosophical critique of intervention--oriented research. Developmental Psychology, 1970, 2, 140-149.

APPENDIX L

Appendix L consisted of copyrighted material not available for reproduction by ERIC at this time. The article, "How Much Can a Six-Month Infant Learn in School?", by Ted Irwin, appeared in Parade: The Sunday Newspaper Magazine; Jan. 9, 1972, p. 10, 13, 15.

APPENDIX M

Appendix M consisted of a copyrighted article not available for reproduction by ERIC at this time. The article, "The Learning of Love," by Jackye Shipley, appeared in "Today's Women," Arkansas Democrat, Feb. 13, 1972.

APPENDIX N

Appendix N consisted of a copyrighted article not available for reproduction by ERIC at this time. The article, "Top Educator Defends Value of Day Care," by Ursula Vils, appeared in Los Angeles Times, Feb. 17, 1972.

Our Distinguished Faculty

DR. BETTYE CALDWELL

Dr. Bettye Caldwell, University of Arkansas professor of elementary education, is dedicated to the idea that a disadvantaged child can keep up in learning with one from a middle-class background—if he has the right kind of preparation in the very early formative years.

Dr. Caldwell is demonstrating this in a revolutionary new program being conducted at Kramer School in Little Rock under the sponsorship of the UofA and the Little Rock School District and with a sizable grant from the federal government.

Children of differing environments learn at almost the same rate up to a certain age, according to almost all studies of the subject that have been done. However, the studies show, most disadvantaged children suffer a sharp decline in their learning at about age two, while middle-class children continue to progress.

Dr. Caldwell believes this can be changed. She says the inescapable conclusion is that many disadvantaged children do not get enough stimulation to continue to develop and enough reinforcement for learning. So, she takes children while they are still infants, or at least toddlers, and begins teaching them, caring for them in a day center which caters to their social needs and saves their working mothers much worry over babysitting.

The Center for Early Development and Education, as the Kramer project is named, has been expanded to include all the children in the six-grade school. This year, there are about 100 pre-elementary students, about 150 elementary, and about 100 more pre-school children.

Dr. Caldwell stresses that her program is aimed at working with the home environment, and to do this, she says, parents must become involved in the educational process.

Dr. Caldwell came to the Kramer project from the University of Syracuse, where she had been involved in a similar program. Her move to Arkansas came about when her husband, Dr. Fred T. Caldwell, Jr., became a professor at the University Medical Center.

A native of Smithville, Texas, Dr. Caldwell took her bachelor's degree from Baylor University, her master's from the State University of Iowa, and her Ph.D. in psychology from Washington University at St. Louis. At that time, Dr. Caldwell's interests lay primarily in medical psychology and she dealt extensively with the psychological problems of aging.

Dr. Caldwell, whose enthusiasm for the Kramer project is without limits, knows that an educational program such as this, with a teaching employe for every seven or eight students and a highly qualified professional staff as well, probably is impractical and impossible to attain for most school districts. But she also is convinced that if the revolutionary concept of education for infants and toddlers is to have any consequence it must reach into the public school system.

Further, she also is convinced that it was necessary to show what can be done, particuarly with regard to underprivileged and Negro children.

For Dr. Caldwell, a school can become an environment where children can be taught social amenities, moral and other values that sometimes are lacking otherwise.